



Instructions and Parts List

3M-Matic™

r70 Type 10700

Random Case Sealer

with AccuGlide™ 2+ Taping Heads

Serial No. _____
For reference, record machine serial number here.



3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000



Important Safety Information

**BEFORE INSTALLING OR
OPERATING THIS
EQUIPMENT**

Read, understand, and follow
all safety and operating
instructions.

Spare Parts

It is recommended you
immediately order the spare
parts listed in the "Spare
Parts/Service Information"
section. These parts are
expected to wear through
normal use, and should be
kept on hand to minimize
production delays.

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To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch equipment you ordered. It has been set up and tested in the factory with Scotch tapes. If technical assistance or replacement parts are needed, call or fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

Technical Assistance:

Call the 3M-Matic™ Helpline at 1-800-328-1390. Please provide the customer support coordinator with the machine number, machine type, model number, and serial number. If you have a technical question that does not require an immediate response, you may fax it to 651-736-7282.

Replacement Parts and Additional Manuals

Order parts by part number, part description, and quantity required. When ordering parts or additional manuals, include the machine name, model number, and type. A parts order form is provided at the back of this manual.

3M Tape Dispenser Parts

241 Venture Drive

Amery, WI 54001-1325

1-800-344-9883

Fax: 715-268-8153

Minimum billing on parts orders will be \$25.00. Replacement part prices available on request.

\$10.00 restocking charge per invoice on returned parts.

Note : Outside the U.S., contact the local 3M subsidiary for parts ordering information.



3M Industrial Adhesives and Tapes

3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

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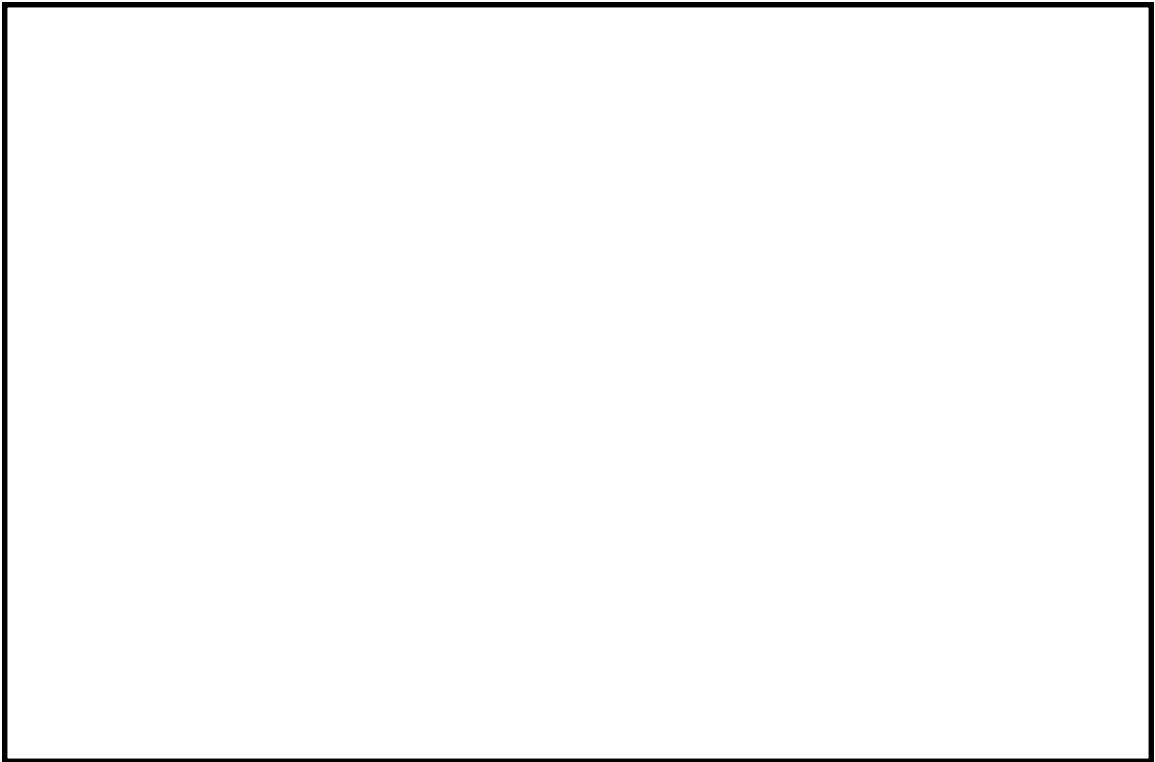
Replacement Parts And Service Information

To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch® equipment you ordered. It has been set up and tested in the factory with Scotch® tapes. If any problems occur when operating this equipment and you desire a service call or phone consultation, call, write, or fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

**SERVICE, REPLACEMENT PARTS, AND ADDITIONAL MANUALS
AVAILABLE DIRECT FROM:**



Order parts by part number, part description, and quantity required. Also, when ordering parts or additional manuals, include machine name, model number, and type.

3M

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

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Instruction Manual

r70, Random Case Sealer, Type 10700

This instruction manual is divided into two sections as follows:

- Section I** Includes all information related to installation, operation and parts for the case sealer.
- Section II** Includes specific information regarding the AccuGlide™ 2+ STD 2 Inch Taping Heads.

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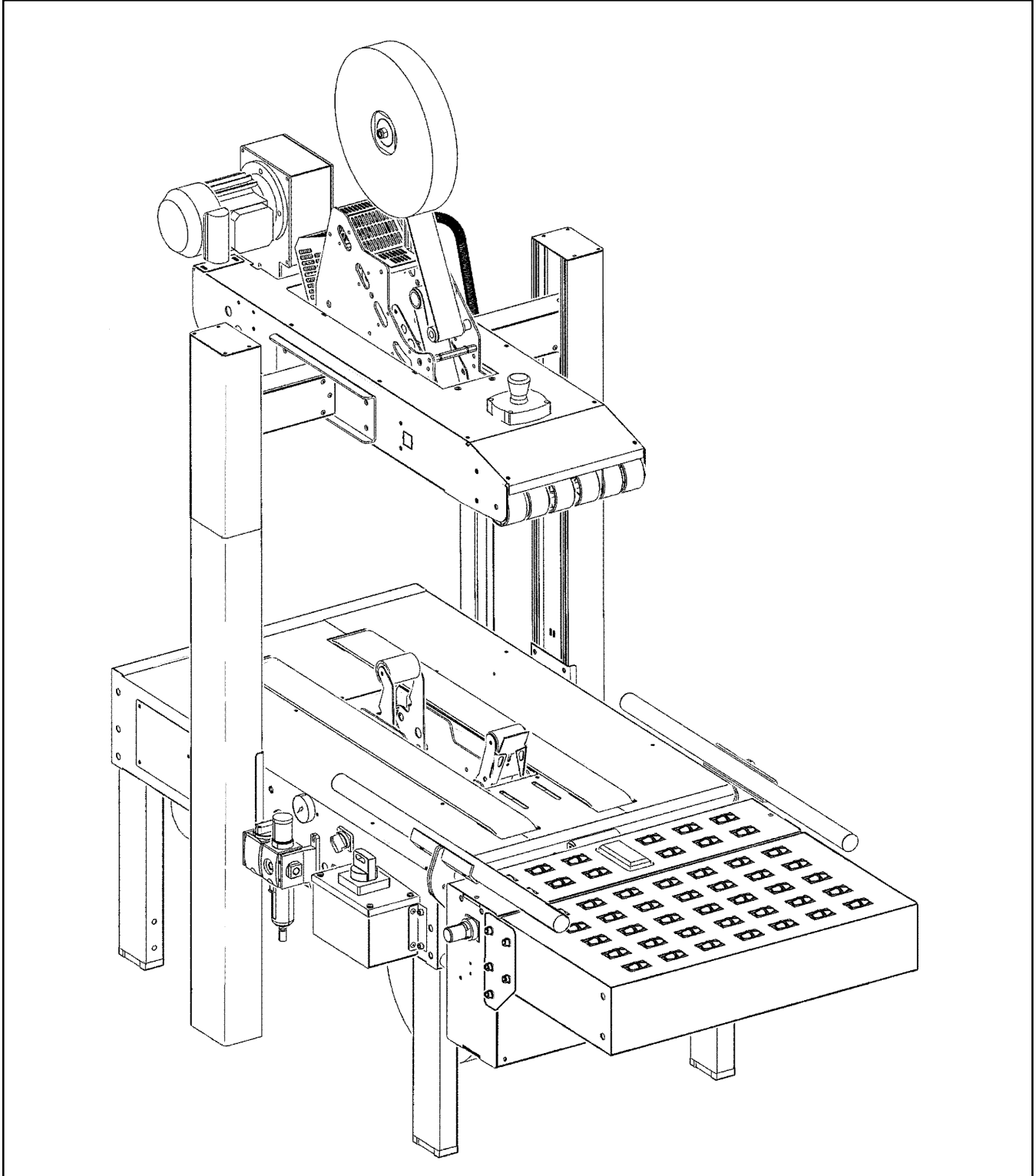
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Section II – AccuGlide™ 2+ STD 2 Inch Taping Heads

(See Section II for Table of Contents)

Intended Use

The 3M-Matic™ r70 Random Case Sealer with AccuGlide™ 2+ Taping Heads is designed to apply a “C” clip of Scotch® pressure-sensitive film box sealing tape to the top and bottom center seam of regular slotted containers. The r70 automatically adjusts to a wide range of box sizes. See "Specifications Section—Box Weight and Size Capacities".



3M-Matic™ r70 Random Case Sealer, Type 10700

Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE:

3M sells its **3M-Matic™ r70 Adjustable Case Sealer, Type 10700** with the following warranties:

1. The drive belts and the taping head knives, springs and rollers will be free from defects in material and manufacture for ninety (90) days after delivery.
2. All other taping head parts will be free from defects in material and manufacture for three (3) years after delivery.
3. All other parts will be free from defects in material and manufacture for two (2) years after delivery.

If any part is defective within this warranty period, your exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part. 3M must receive actual notice of any alleged defect within a reasonable time after it is discovered, but in no event shall 3M have any obligation under this warranty unless it receives such notice within five (5) business days after the expiration of the warranty period. All notices required hereunder shall be given to 3M solely through the 3M-Matic™ Helpline (800-328-1390). To be entitled to repair or replacement as provided under this warranty, the part must be returned as directed by 3M to its factory or other authorized service station designated by 3M. If 3M is unable to repair or replace the part within a reasonable time after receipt thereof, 3M, at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to remove any part or equipment or to install the repaired or replacement part or equipment. 3M shall have no obligation to repair or replace those parts failing due to normal wear, inadequate or improper maintenance, inadequate cleaning, non-lubrication, improper operating environment, improper utilities, operator error or misuse, alteration or modification, mishandling, lack of reasonable care, or due to any accidental cause.


Limitation of Liability: Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from this 3M equipment, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including breach of warranty, breach of contract, negligence, or strict liability.

Note: The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized representatives of 3M and seller.


Contents – r70 Random Case Sealer


- (1) r70 Random Case Sealer, Type 10700
- (1) Upper Tape Drum/Bracket/Hardware
- (2) Column Bumper Bracket/Hardware
- (1) Tool/Spare Parts Kit
- (1) Instruction and Parts Manual

Important Safeguards

 This safety alert symbol identifies important messages in this manual. **READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.**

Explanation of Signal Word Consequences

 **WARNING:** Indicates a potentially hazardous situation, which, if not avoided, could result in death, serious injury, or property damage.

 **CAUTION:** Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury, or property damage.

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
 - Read, understand and follow all safety and operating instructions before operating or servicing the case sealer.
 - Allow only properly trained and qualified personnel to operate and service this equipment.
 - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.
- **To reduce the risk associated with pinches and entanglement hazards:**
 - Do not leave the machine running while unattended.
 - Turn the machine off while not in use.
 - Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running.
- **To reduce the risk associated with hazardous voltage:**
 - Position electrical cord away from foot and vehicle traffic.

WARNING (continued)

- **To reduce the risk associated with impact hazards:**
 - Always use appropriate supporting means when working under the upper drive assembly.
- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.
- **To reduce the risk associated with fire and explosion hazards:**
 - Do not operate this equipment in potentially flammable or explosive environments.
- **To reduce the risk associated with muscle strain:**
 - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
 - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

CAUTION

- **To reduce the risk associated with pinches and entanglement hazards:**
 - Keep hands clear of the upper head support assembly as boxes are transported through the machine.
 - Always feed boxes into the machine by pushing only from the end of the box.
 - Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads.
- **To reduce the risk associated with pinches and impact hazards:**
 - Keep away from the pneumatically controlled upper drive assembly and box centering guides when air and electric supplies are on.

Important Safeguards (Continued)

If the following safety labels are damaged or destroyed, they must be replaced to ensure operator safety. Replacement part numbers for individual labels are shown in Figures 1-1 through 1-3. A label kit, part number 78-8137-1256-5, is available that includes all labels used on the case sealer. See "Safety and Information Labels," at the end of Parts Illustration List, Section I.

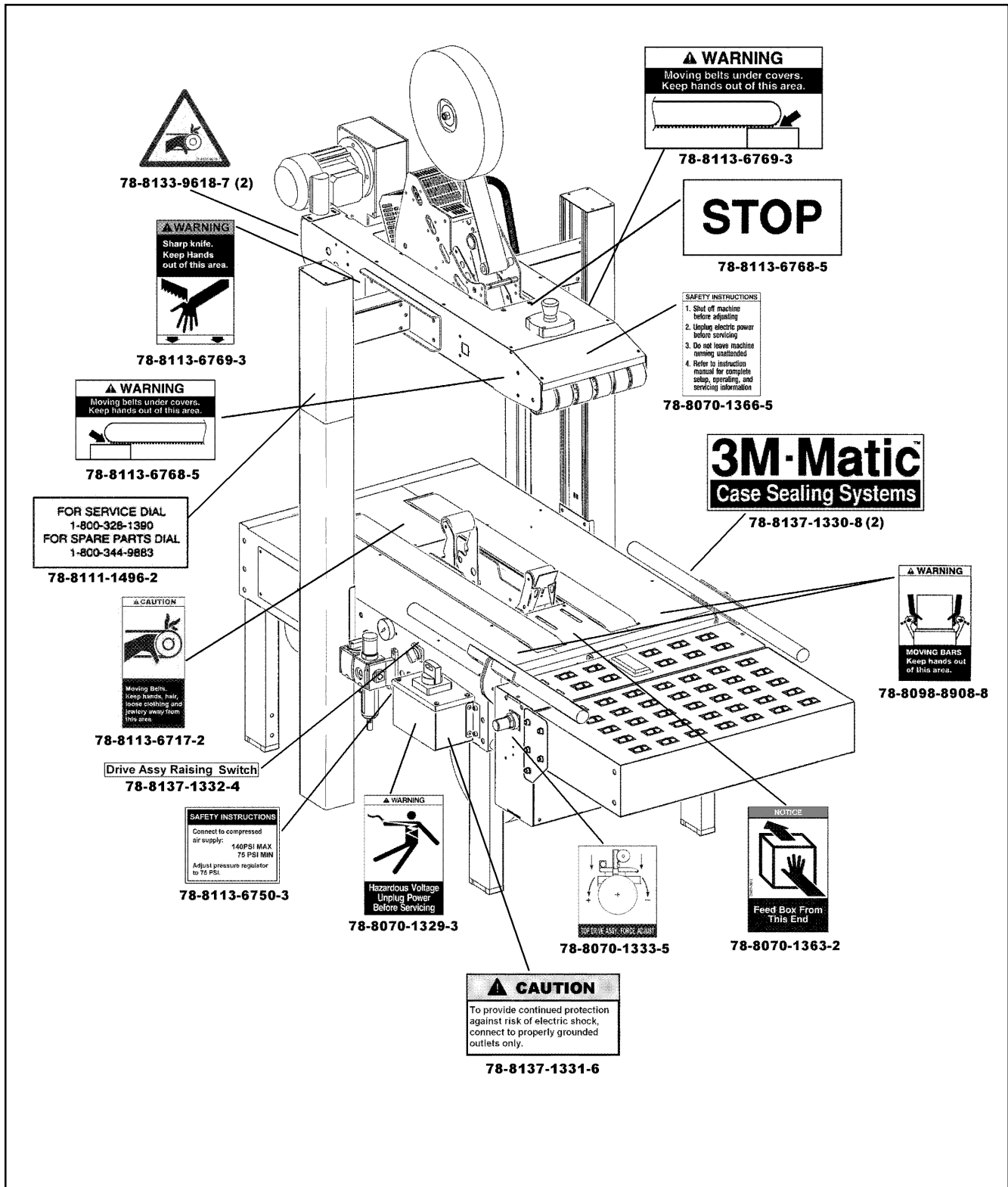


Figure 1-1 Replacement Labels and 3M Part Numbers

Important Safeguards (Continued)

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
 - Allow only properly trained and qualified personnel to operate and service this equipment.

Operator Skill Level Descriptions

Skill 1: Machine Operator

This operator is trained to use the machine with the machine controls, to feed cases into the machine, make adjustments for different case sizes, to change the tape and to start, stop, and restart production.

Important: The factory manager must ensure that the operator has been properly trained on all the machine functions before starting work.

Skill 2: Mechanical Maintenance Technician

This operator is trained to use the machine as the MACHINE OPERATOR and in addition is able to work with the safety protection disconnected, to check and adjust mechanical parts, to carry out maintenance operations and repair the machine. He is not allowed to work on live electrical components.

Skill 2a: Electrical Maintenance Technician

This operator is trained to use the machine as the MACHINE OPERATOR and is able to work with the safety protection disconnected, to make adjustments, to carry out maintenance operations and repair the electrical components of the machine. He is allowed to work on live electrical panels, connector blocks, and control equipment.

Skill 3: Specialist From the Manufacturer

Skilled operator sent by the manufacturer or its agent to perform complex repairs or modifications, when agreed with the customer.

Operator's Skill Levels Required to Perform the Main Operations on Machine

Operation	Machine Status	Required Operator Skill	Number of Operators
Machine installation and setup	Running with safety protections disabled	2 and 2a	2
Tape replacement	Stopped by pressing the EMERGENCY STOP button	1	1
Blade replacement	Electric power disconnected	2	1
Drive belt replacement	Electric power disconnected	2	1
Ordinary maintenance	Electric power disconnected	2	1
Extraordinary mechanical maintenance	Running with safety protections disabled	3	1
Extraordinary electrical maintenance	Running with safety protections disabled	2a	1

Specifications

1. Power Requirements:

Electrical: 115 VAC, 60 Hz, 5.6 A (680 watts)

Pneumatic: 5 bar gauge pressure [70 PSIG]

110 liter/min @ 21° C, 1.01 bar [3.75 SCFM] at 15 boxes per minute

A pressure regulator is included

The machine is equipped with two 1/6 HP motors and comes with an 2.4 m [8 foot] standard neoprene covered power cord and a grounded plug. Contact your 3M Representative for power requirements not listed above.

2. Operating Rate:

Up to 15 boxes per minute. Actual production rate is dependent on box size, box size mix, and operator dexterity.

Box drive belt speed is approximately 0.38 m/s [75 FPM]

3. Operating Conditions:

Use in dry, relatively clean environments at 4°C to 50°C [40°F to 120°F] with clean, dry, boxes.

Note: Machine should not be washed or subjected to conditions causing moisture condensation on components.



WARNING

- **To reduce the risk associated with fire and explosion hazards:**

- Do not operate this equipment in potentially flammable or explosive environments.

4. Tape:

Scotch® pressure-sensitive film box sealing tapes.

5. Tape Width:

36 mm or 1.5 inches minimum to 50 mm [2 inches] maximum

6. Tape Roll Diameter:

Up to 405 mm [16 inches] maximum on a 76.2 mm [3 inches] diameter core.

(Accommodates all system roll lengths of **Scotch®** film tapes.)

7. Tape Application Leg Length—Standard:

70 mm ± 6 mm [2.75 inches ± 0.25 inches]

Tape Application Leg Length—Optional:

(See "Special Setup Procedure")

50 mm ± 6 mm [2 inches ± 1/4 inches]

(Specifications continued on next page)

Specifications (Continued)

8. Box Board:

Style: regular slotted containers, RSC
125 to 275 P.S.I. bursting test, single wall or double wall B or C flute.
23-44 lbs. per inch of width Edge Crush Test (ECT)

9. Box Weight and Size Capacities:

A. Box Weight Range 5 lbs.–65 lbs. [2.3 kg–29.5 kg]. Contents must support flaps.

B. Box Size:	Minimum	Maximum
Length:	150 mm [6.0 inches]	Unlimited
Width:	150 mm [6.0 inches]*	550 mm [21.5 inches]
Height:	120 mm [4.75 inches]**	550 mm [21.5 inches]

* Cartons narrower than 250 mm [10 inches] in width may require more frequent belt replacement because of limited contact area.

** 95 mm [3.75 inches] height with heads adjusted to apply 50 mm [2 inches] tape leg lengths. See "Special Setup Procedure".

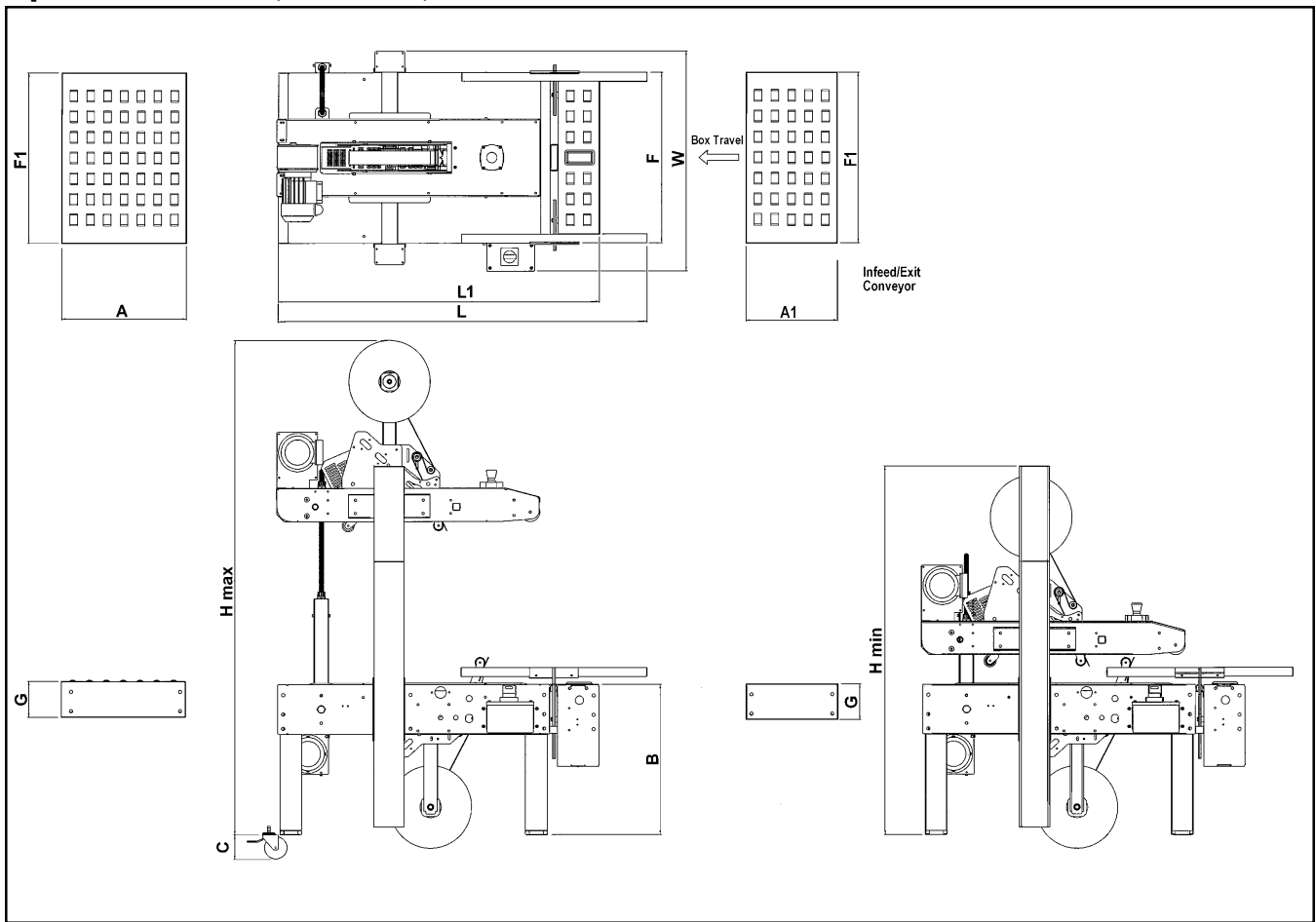
Note: The case sealer can accommodate most boxes within the size range listed above. However, if the box length (in direction of seal) to box height ratio is 0.5 or less, then several boxes should be test run to ensure proper machine performance.

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

$$\frac{\text{BOX LENGTH IN DIRECTION OF SEAL}}{\text{BOX HEIGHT}} = \text{SHOULD BE GREATER THAN 0.5}$$

Any box ratio approaching this limitation should be test run to ensure proper performance.

Specifications (Continued)



10. Machine Dimensions:

	W	L	H	A	A1	B	C**	F	F1	G	T
Minimum mm (inches)	805 (32)	1360 (53.5)	1340 (52.8)	460 (18.1)	336 (13.2)	545 (21.5)	106 (4.2)	620 (24.4)	620 (24.4)	130 (5.2)	1640 (64.6)
Maximum mm (inches)	--	--	1790 (70.5)	--	--	800 (31.5)	--	--	--	--	--

* Exit conveyor is optional

** Casters are optional

Weight – 193 kg [425 lbs.] crated (approximate)
170 kg [375 lbs.] uncrated (approximate)

11. Setup Recommendations:

- Machine must be level.
- Customer supplied infeed and exit conveyors (if used) should provide straight and level box entry and exit.
- Exit conveyors (powered or gravity) must convey sealed boxes away from machine.

Installation and Setup

Receiving And Handling

After the machine has been uncrated, examine the case sealer for damage that might have occurred during transit. If damage is evident, file a damage claim immediately with the transportation company and notify your 3M Representative.

Machine Setup

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
 - Read, understand, and follow all safety and operating instructions before operating or servicing the case sealer.

The following instructions are presented in the order recommended for setting up and installing the case sealer, as well as for learning the operating functions and adjustments. Following them step-by-step will result in thoroughly understanding the case sealer and installing it in a manner that best utilizes its many features. Refer to Figure 3-1 to identify the various components of the case sealer.

REQUIRED TOOLS

A 17 mm and 21 mm open-end wrench and a 17 mm hex socket wrench are provided with the machine.

The following customer-supplied tools are required for machine setup, maintenance, and adjustments.

- 3 mm hex wrench
- 4 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 7 mm combination wrench
- 8 mm combination wrench
- 10 mm combination wrench
- 13 mm combination wrench
- 17 mm combination wrench
- #2 Phillips screwdriver

PACKAGING AND SEPARATE PARTS

1. Remove the staples from the shipping carton or cut around them.

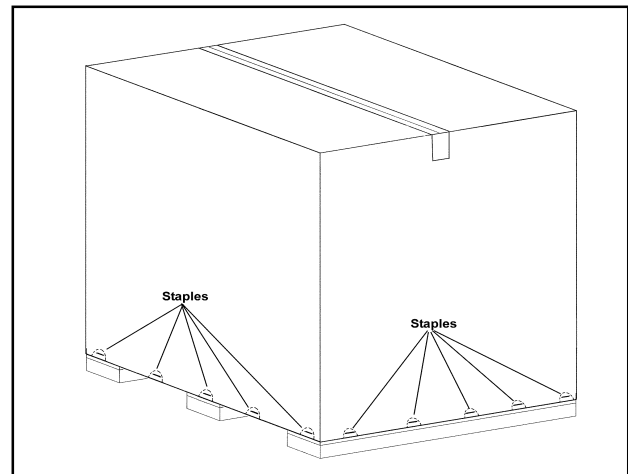


Figure 2-1—Remove Staples

2. Remove the shipping carton from the pallet and from the machine.

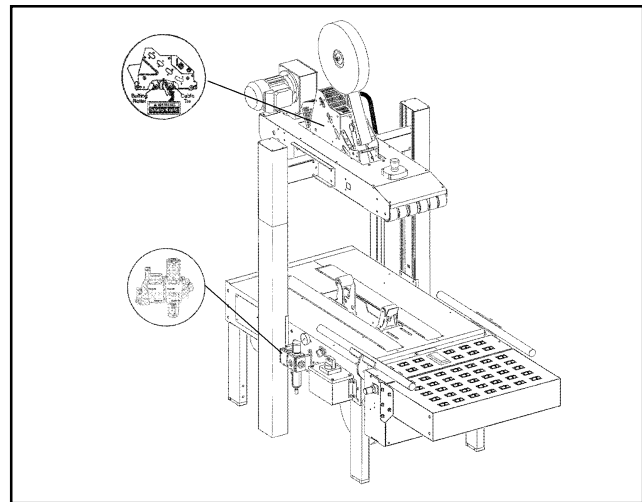


Figure 2-2—r70 Frame Setup

WARNING

- **To reduce the risk associated with muscle strain:**
 - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
 - Use proper body mechanics when removing or installing taping heads that are moderately heavy or awkward to lift.

Installation and Setup (Continued)

- Using a 10 mm combination wrench, remove the fasteners that secure each of the case sealer legs to the pallet as shown in Figure 2-3.

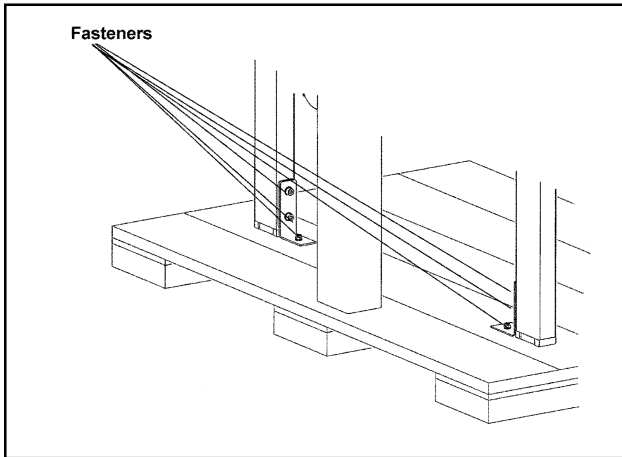


Figure 2-3—Remove Fasteners

- Remove the leg height adjustment cap screws and replace with the cap screws from the tool kit. Remove and replace them one at a time to keep the inner threaded plate in position.
- Remove the machine from the pallet and move it into position.

Important: Whenever the machine is lifted with a fork truck, ensure that the forks span completely across the machine frame and do not contact any wiring or mechanism under the machine frame. In some cases, the lower taping head may need to be removed to avoid damage.

WARNING

- To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

- Cut the plastic straps that attach the top head to the frame as shown in Figure 2-4. Retain the tool and spare parts kit for later use.

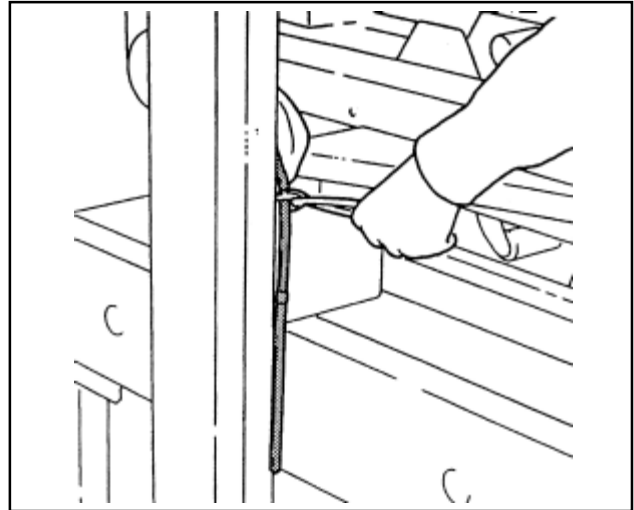


Figure 2-4—Cut the Plastic Straps

- Assemble the column cap onto the column as shown in Figure 2-5.
- Fasten the column setscrews as shown in Figure 2-6.

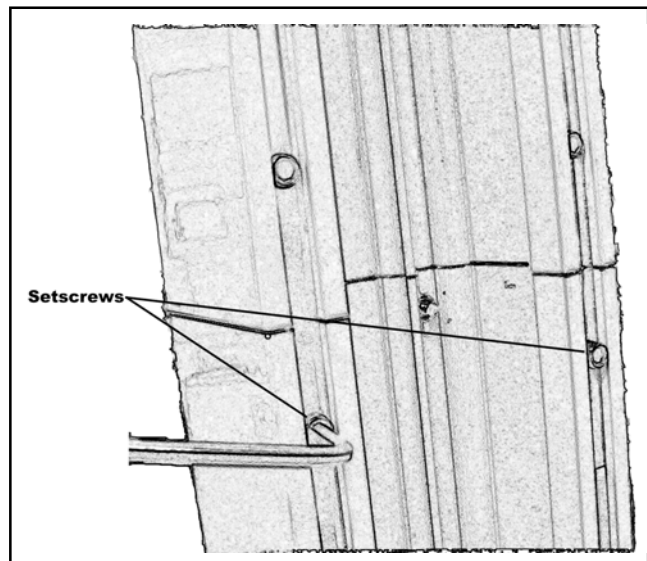


Figure 2-5—Column Cap Setscrews

Installation and Setup (Continued)

WARNING

- **To reduce the risk associated with muscle strain:**
 - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.

INFEED CONVEYOR ASSEMBLY

1. Remove the conveyor and the package of parts from the carton.
2. Verify that the package contains two flat plates, ten M8 x 20 hex socket head screws, and ten M8 flat washers.
3. To assemble the infeed conveyor, refer to Figure 2-2 and locate the three bolt holes on the infeed end of the case sealer frame and the two bolt holes on the infeed conveyor.
4. Place the flat plates over the conveyor and the frame on each side and secure them with five M8 x 20 screws and M8 washers.
5. Insert a M8 x 20 screw in each hole so that only a few threads take hold.

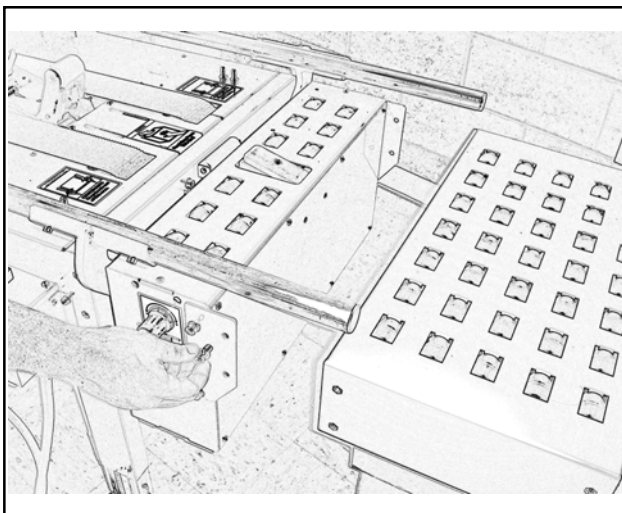


Figure 2-2—Infeed Conveyor

CENTERING GUIDES

1. Remove the two centering guides and four M6 x 20 socket head screws from the package.
2. Using a 5 mm hex wrench, attach the centering guides to the rails with four M6 x 20 screws (two in each guide) as shown in Figure 2-3.

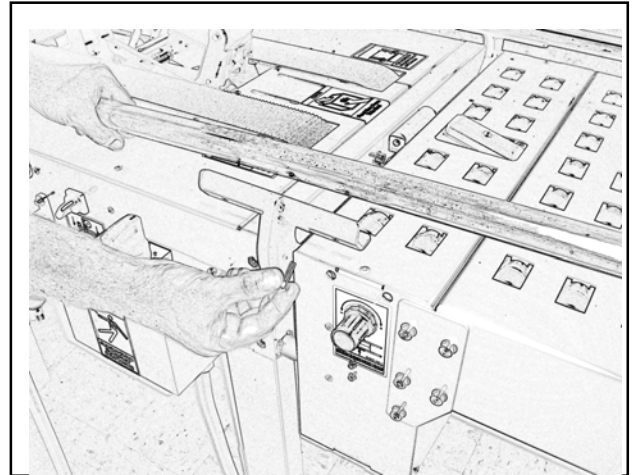


Figure 2-3—Centering Guides

Installation and Setup (Continued)

MACHINE BED HEIGHT

The case sealer is equipped with four adjustable legs that are located at the corners of the machine frame. The legs can be adjusted to obtain different machine bed heights. See the "Specifications" section.

WARNING

- **To reduce the risk associated with muscle strain:**

- Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
- Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

To adjust the machine bed height, do the following:

1. Use appropriate material handling equipment and blocking techniques to raise the machine frame to allow adequate leg adjustment.
2. Using a 6 mm hex wrench, loosen the socket head screws that hold the inner leg assembly to the machine as shown in Figure 2-10.
3. Adjust the leg length for the desired machine bed height. Adjust all four legs equally.
4. Retighten the screws.

Note: *It is not necessary to fasten the machine to the floor.*

TAPE LEG LENGTH

Taping heads are preset to apply 70 mm [2.75 inches] long tape legs. To change tape leg length to 50 mm [2.0 inches], refer to Section II, "Special Setup Procedure—Changing the Tape Leg Length".

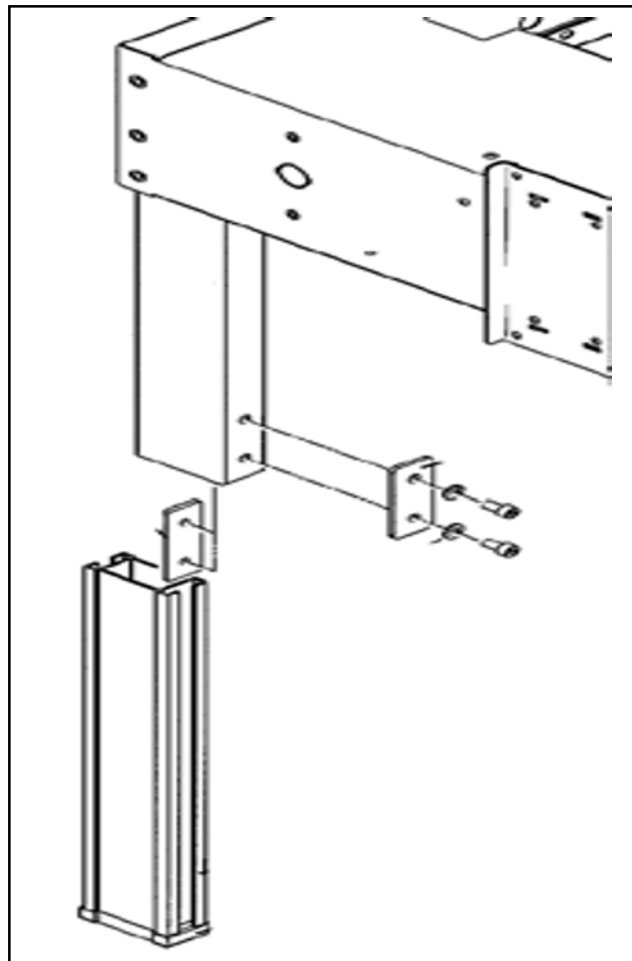


Figure 2-10—Machine Bed Height Adjustment

Installation and Setup (Continued)

ELECTRICAL CONNECTION AND CONTROLS

The electrical control box (with circuit breaker) and "On/Off" switch are located on the left side of the machine frame. See Figure 3-1. If desired, for operator convenience, the "On/Off" switch can be relocated to the right side of the machine frame. A standard three-conductor power cord with plug is provided at the back of the electrical control box. The receptacle providing this service shall be properly grounded. Before the power cord is plugged into a 115 Volt, 60 Hz outlet, verify that all packaging materials and tools are removed from the machine. **Do not plug electrical cord into outlet until ready to run machine.**

Use of an extension cord is not recommended. However, if one is needed for temporary use, it must have a wire size of 1.5 mm diameter [AWG 16], have a maximum length of 30.5 m [100 ft], and must be properly grounded.

WARNING

- **To reduce the risk associated with hazardous voltage:**
 - Position electrical cord away from foot and vehicle traffic.

Note: Machines outside the U.S. may be equipped with 220/240 Volt, 50 Hz systems or other electrical requirements compatible with local practice.

SPACE REQUIREMENTS

The left side of the machine must be a minimum of 1.0 m (39.4 inches) from the nearest wall.

The right side of the machine must be a minimum of 0.7 m (27.6 inches) from the nearest wall.

The machine requires a minimum of 2.7 m (106.3 inches) height.

OPERATOR WORKING POSITION

Figure 2-11 illustrates the correct operator working position.

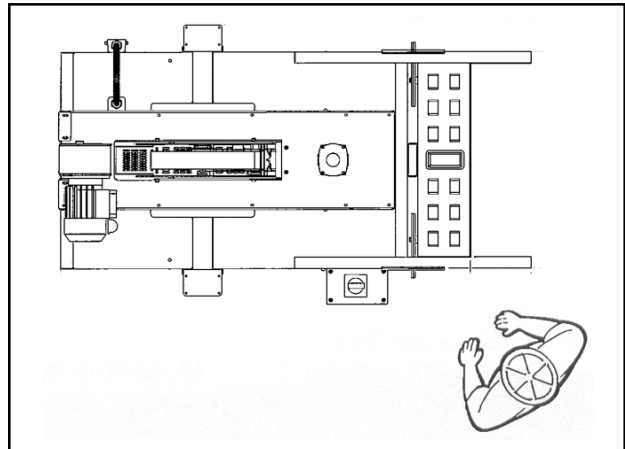


Figure 2-11—Operator Working Position

Installation and Setup (Continued)

PNEUMATIC CONNECTION

Important: *Use care when working with compressed air.*

The case sealer requires a 5.2 bar gauge pressure 110 liter/min [75 PSIG], @ 21°C, 1.01 bar [3.75 SCFM] compressed air supply. As shown in Figure 3-1, an on/off valve, pressure regulator, and filter are provided to service the air supply.

Note: *A precision regulator is used to balance the top drive assembly. Due to the self-relieving feature of this regulator, a small amount of air continually vents to the atmosphere. This is normal and amounts to approximately 3 liter/min. [0.1 SCFM].*

1. Read and remove safety tag from pneumatic "On/Off" valve.
2. Connect the main air supply line to the inlet side of the On/Off valve using the barbed fitting and hose clamp provided. The customer supplied air hose (8 mm [5/16 inches] Inner Diameter) must be clamped tightly to the barbed fitting.

If another type of connector is desired, the barbed fitting can be removed and replaced with the desired 1/4-18 NPT threaded connector.

Always turn the air valve **Off** when the air supply line is being connected or disconnected.

3. Turn the air supply on by turning the air On/Off valve to On.

Note – *The air valve has provisions for lock out/tag out according to plant regulations.*

WARNING

- **To reduce the risk associated with impact hazards:**
 - Always use appropriate supporting means when working under the upper drive assembly

Installation and Setup (Continued)

TAPING HEAD SETUP

1. Cut the plastic ties holding the upper and lower taping heads in position, as shown in Figure 2-8. Hold taping head Buffing Roller while cutting the plastic tie. Allow buffing/applying arms to extend slowly.

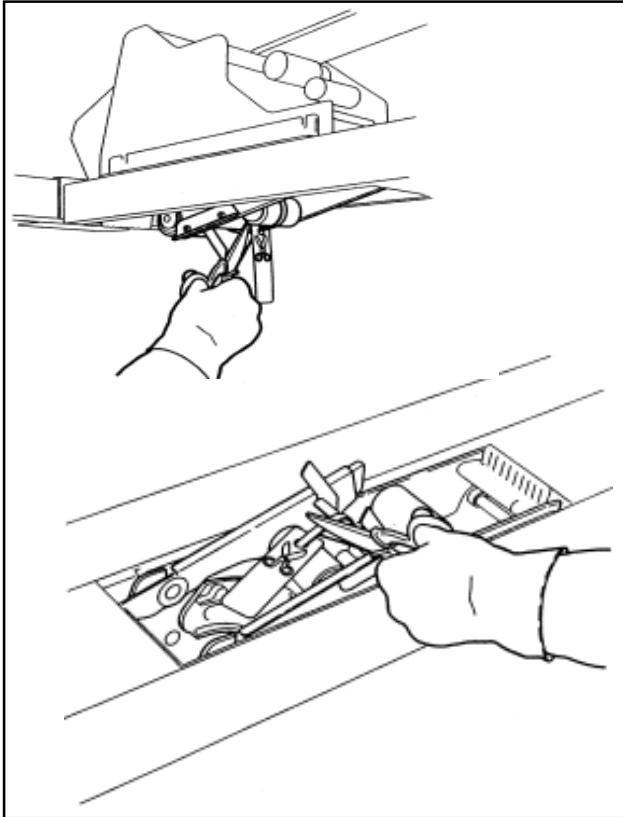


Figure 2-8—Cut the Plastic Ties

2. Verify that the upper and lower taping heads move freely by pushing the buffing roller into the taping head.
3. Using a 10 mm open-end wrench, loosen the capscrew on the tape drum bracket assembly and move the assembly to the vertical position, as shown in Figure 2-9. Install additional capscrews from the tool kit. The tape drum bracket assembly can be pivoted as necessary to provide tape roll clearance from the floor or overhead obstacles.

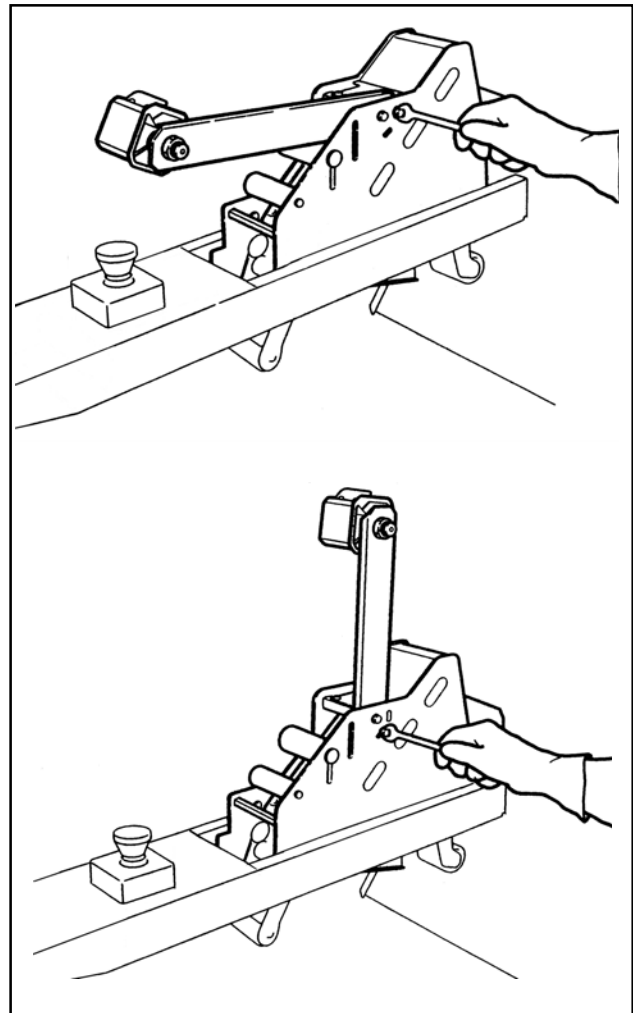


Figure 2-9—Lower Tape Drum Bracket Position

INITIAL STARTUP OF CASE SEALER

After completing the "Installation and Setup" procedure, continue through "Operation" for tape loading and startup to ensure that the case sealer is properly adjusted to run boxes.

Operation (Continued)

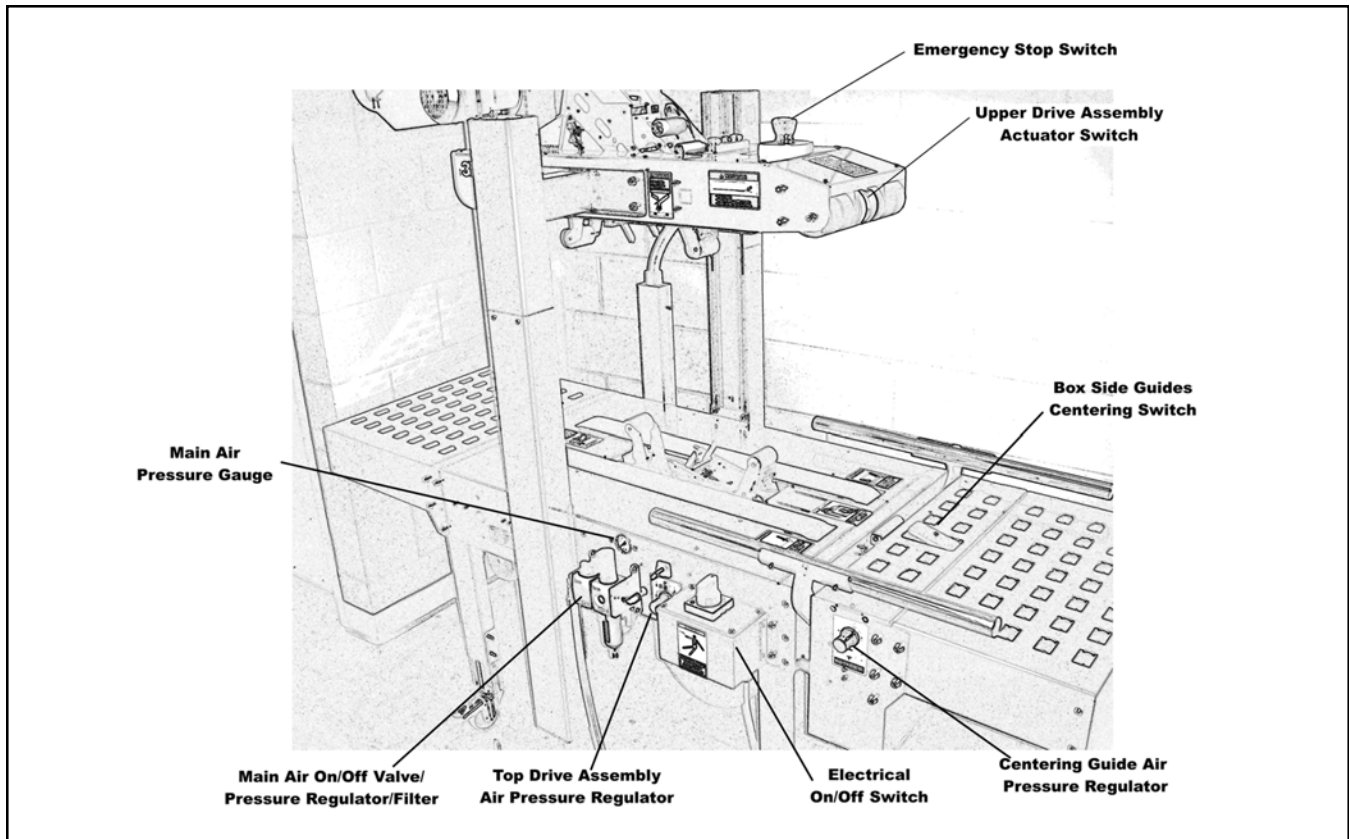


Figure 3-2—Controls, Valves and Switches

Electrical On/Off Switch (Figure 3-2)

The box drive belts are turned on and off with the electrical switch on the side of the machine frame.

The case sealer has a circuit breaker located in the electrical enclosure on the left side of the machine frame. If circuit becomes overloaded and circuit breaker trips, unplug the machine electrical cord and determine cause of overload. After two minutes, plug machine electrical cord into outlet and restart machine by rotating the On/Off switch to Off (O) then On (I).

Main Air On/Off Valve/Pressure Regulator/Filter (Figure 3-3)

This set of pneumatic components controls, regulates and filters plant air supply to the two separate control circuits of the case sealer.

On/Off Valve (Figure 3-2)

On—turn arrows on switch toward the front of the machine; Off—turn arrows on switch toward the left side of the machine.

Note: Turning air supply off automatically bleeds air pressure from the case sealer air circuits.

Always turn off the air when machine is not in use, when servicing the machine, or when connecting or disconnecting air supply line.

Note: The air valve has provisions for lockout/tagout according to plant regulations.

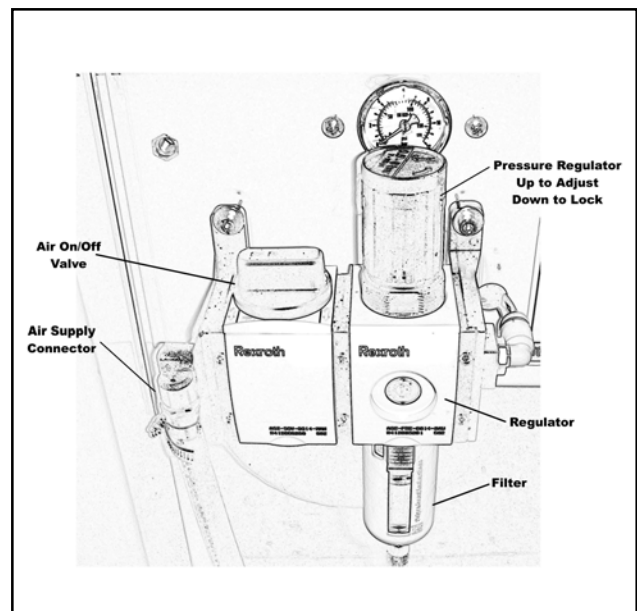


Figure 3-3—On/Off Valve/Regulator/Filter

Operation (Continued)

Pressure Regulator (Figure 3-3)

Regulates main air pressure to the machine to adjust pressure, pull knob up and turn; push down to lock setting.

Filter (Figure 3-3)

Removes dirt and moisture from plant air before it enters the case sealer pneumatic circuits. If water collects in bottom of bowl, unscrew the valve on the bottom of bowl to drain. When empty, retighten valve.

Emergency Stop Switch (Figure 3-2)

The machine electrical supply can be turned off by pressing the latching emergency stop switch. To restart machine, rotate emergency stop switch a quarter turn clockwise to releases switch latch. Restart machine by turning the switch to the "O" (Off) position then to "I" (On).

Upper Drive Assembly Actuator Switch (Figure 3-2)

This switch, when touched by the leading edge of a box, pneumatically raises the upper drive assembly to allow insertion of the box under the drive belts. As the box moves under the switch, releasing it, the upper drive assembly descends on the box and the drive belts convey the box through the machine. When switch is turned, the upper drive assembly rises. When the switch is released, the upper drive assembly descends to its rest position.

Centering Guide Switch (Figure 3-7)

This pneumatic switch controls the box centering guides. When switch is activated by a box entering the case sealer, the centering guides close (centering the box), and released (after box passes over switch), the guides open.

Air Pressure Regulator, Centering Guide Force Adjustment (Figure 3-4)

This regulator is used to adjust centering guides according to weight of boxes. Pressure should be adequate to center boxes, but low enough to allow easy pushing of boxes under taping head.

To adjust the regulator setting, pull the knob outward, rotate the knob to the desired setting. Push the knob inward to lock it and prevent unintentional adjustment.



Figure 3-4—Air Regulator, Centering Guides

Air Pressure Regulator, Top Drive Assembly Force Adjustment (Figure 3-5)

Set nominally to control the "down" movement of top drive assembly and the pressure exerted against the box as shown in Figure 3-5. The regulator setting is changed as necessary for the boxes being sealed to provide adequate drive belt pressure against the box to positively convey the boxes through the machine. If the boxes stop or hesitate while being conveyed, decrease the regulator pressure. This increases the drive belt force on the box for more friction between the box and drive belts. Adjust the pressure setting as necessary to get continuous movement of boxes through the machine.

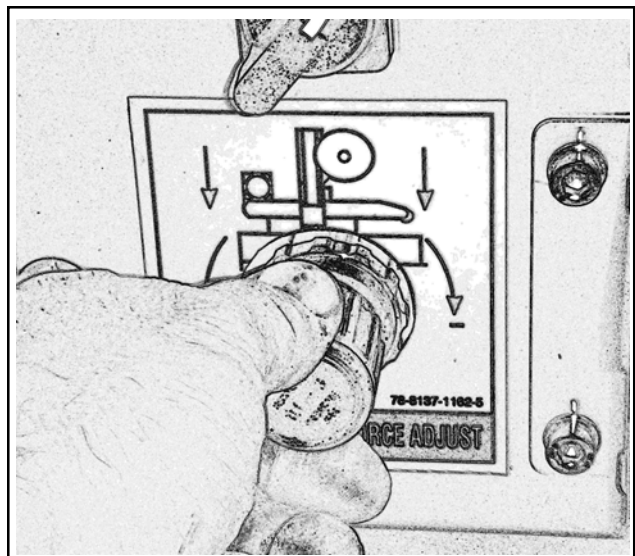


Figure 3-5—Air Regulator/Gauge, Top Drive Assembly

Operation (Continued)

For boxes which are fully packed with products that support the top flaps, the adjustment of this regulator is not critical since the boxes can support the pressure of the upper frame (drive belts) at a wide range of regulator settings. However, if under-filled or fragile boxes are sealed, this regulator can be used to set the upper frame pressure to a reduced level that is still adequate to positively convey the box and to prevent damage of boxes. The regulator setting can be locked by pushing the knob inward.

Note: A precision regulator is used to balance the top drive assembly. Due to the self relieving feature of this regulator a small amount of air will continually vent to the atmosphere. This is normal and amounts to approximately 3 liter/min [0.1 SCFM].

Main Air Pressure Gauge (Figure 3-2)

Indicates main air regulator pressure setting. Air regulator should be adjusted so gauge reads 5.2 bar gauge pressure [75 PSIG].

Pneumatic Valve, Drive Assembly Raising Switch (Figure 3-6)

The Pneumatic Valve Drive Assembly Raising Switch is used to hold the upper drive assembly to its fully raised position for tape threading and maintenance.

To raise the drive assembly, turn the switch to the right. To lower the drive assembly to its fully lowered position, turn the switch to the left.

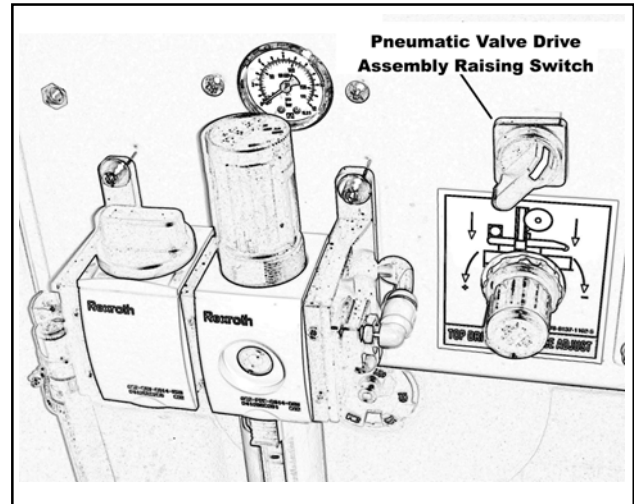


Figure 3-6—Mechanical Latch, Upper Drive Assembly

Operation (Continued)

Tape Loading/Threading

See Section II.

WARNING

- **To reduce the risk associated with muscle strain:**
 - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

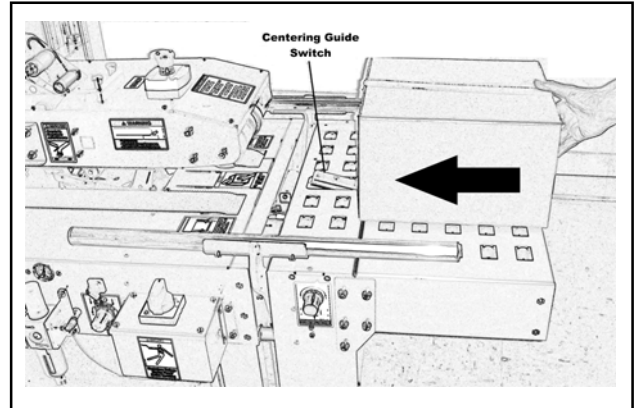


Figure 3-7—Centering Guide Switch

Theory of Operation

CAUTION

- **To reduce the risk associated with pinches and entanglement hazards:**
 - Always feed boxes into the machine by pushing only from the end of the box.
 - Keep hands clear of the upper head support assembly as boxes are transported through the machine.
- **To reduce the risk associated with pinches and impact hazards:**
 - Keep away from the pneumatically controlled upper drive assembly and box centering guides when air and electric supplies are on.

2. Once the box is centered by the guides, the operator pushes the box against the raising switch on the upper drive assembly, as shown in Figure 3-8, two air cylinders raise the upper drive assembly. The upper taping head will continue to rise above the box height so the operator can insert the box underneath the upper drive belts.

CAUTION

- **To reduce the risk associated with pinches and entanglement hazards:**
 - Keep hands clear of the upper head support assembly as boxes are transported through the machine

The air supply powers movement of the centering guides and upper drive assembly to automatically adjust the case sealer to the box size being sealed as follows:

1. A box centering switch in the center of the infeed roller conveyor actuates movement of the centering guides. When the operator pushes a box onto the infeed conveyor, as shown in Figure 3-7, the lever is depressed causing the air cylinder powered centering guides to move inward, centering the box.

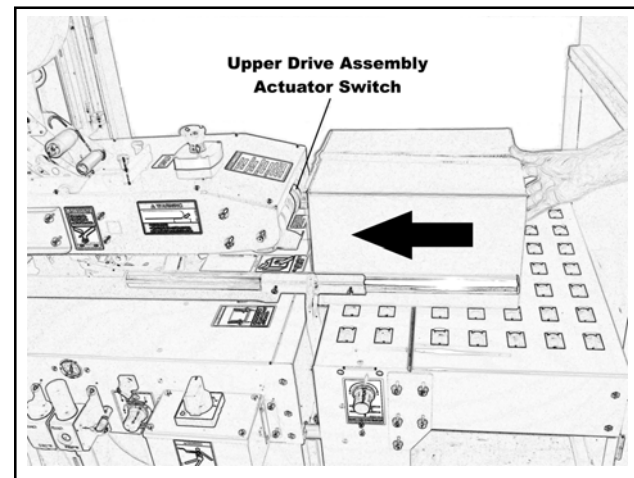


Figure 3-8—Upper Drive Assembly Actuator Switch

Operation (Continued)



CAUTION

- **To reduce the risk associated with pinches and entanglement hazards:**
 - Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads

3. Once the box is pushed under the upper taping head, the upper drive assembly actuator switch is released to lower the upper drive assembly to descend onto the box top, as shown in Figure 3-9, allowing the drive belts to convey the box through the upper and lower taping heads for application of the tape seals.
4. As the box is conveyed through the machine, the centering guide switch is released causing the centering guides to return to their full open position, ready for insertion of the next box.
5. Once the box is conveyed from under the upper taping head, the upper drive assembly descends to its rest position, ready for insertion of the next box.

At this point it is recommended that the centering guides and upper drive assembly switches be manually actuated to better understand their functions. Depress the centering guide switch to close the guides. Release the switch to open the guides. Depress the upper drive assembly raising switch to raise the upper drive assembly. Release the upper drive assembly raising switch to lower the drive assembly.

Box Sealing

1. Turn main air valve to (On).

Important: Before turning drive belts on, be sure no tools or other objects are on the conveyor bed.

2. Turn the switch on side of machine frame to start drive belts.
3. Feed boxes to machine. Always allow previous box to exit machine BEFORE feeding next box.
4. Turn air and electrical supplies "Off" when machine is not in use.
5. Reload and thread tape as necessary.
6. Be sure machine is cleaned and lubricated according to recommendations in "Maintenance" section of this manual.

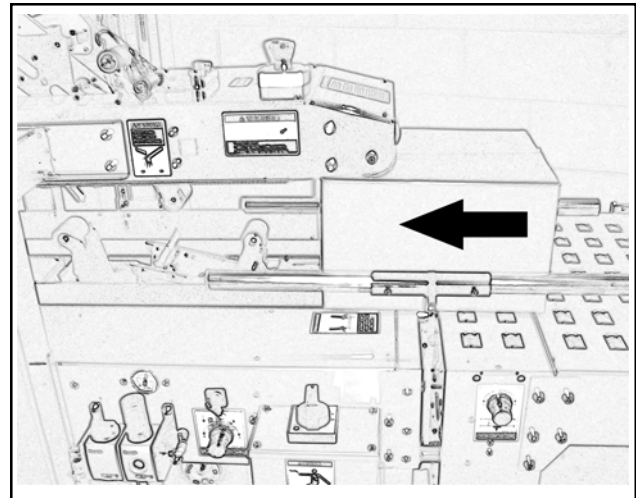


Figure 3-9—Box Conveyed Through Machine

Machine or taping head adjustments are described in "Adjustments" Section I for machine or Section II for taping heads.

Note: Box drive motors are designed to run at a temperature somewhat above ambient room temperature. A motor may feel hot to the touch during normal operation.

Maintenance

The case sealer has been designed for long, trouble free service. The machine performs best when it receives routine maintenance and cleaning. Machine components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the machine or to the product.



WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
 - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.
- **To reduce the risk associated with impact hazards:**
 - Always use appropriate supporting means when working under the upper drive assembly.

Lubrication

The machine bearings, including the drive motor, are permanently lubricated and sealed and do not require additional lubricant.

Cleaning

Note – *Never attempt to remove dirt from the machine by blowing it out with compressed air. This can cause the dirt to be blown inside the motor and onto sliding surfaces which may cause premature equipment wear. Never wash or subject equipment to conditions causing moisture condensation on components. Serious equipment damage could result.*

Regular slotted containers produce a great deal of dust and paper chips when processed or handled in equipment. If this dust is allowed to buildup on machine components, it can cause component wear and overheating of drive motor. The dust buildup can best be removed from the machine by a shop vacuum. Depending on the number and type of boxes sealed in the case sealer, this cleaning should be done approximately once per month. If the boxes sealed are dirty, or if the environment in which the machine operates is dusty, cleaning on a more frequent basis may be necessary. Excessive dirt buildup that cannot be removed by vacuuming should be wiped off with a damp cloth.

Maintenance (Continued)

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads

Circuit Breaker

The case sealer is equipped with a circuit breaker which trips if the motors are overloaded. Located inside the electrical enclosure on the side of the machine frame. The circuit breaker has been preset at the factory to 4.5 amps and requires no further maintenance.

If circuit is overloaded and circuit breaker trips:

1. Determine cause of overload and correct.
2. Rotate the switch mechanism to the "O" (Off) position then to "I" (On). If circuit breaker will not reset, wait 2 minutes and retry.

Knife Replacement, Taping Head

See Section II, "Maintenance—Blade (Knife) Replacement."

Box Drive Belt Replacement

3M recommends replacing drive belts in pairs, especially if belts are unevenly worn.

DRIVE PULLEY RINGS

Before installing a new belt, check the orange plastic drive pulley rings for wear. If torn, broken, or worn smooth, replace the rings.

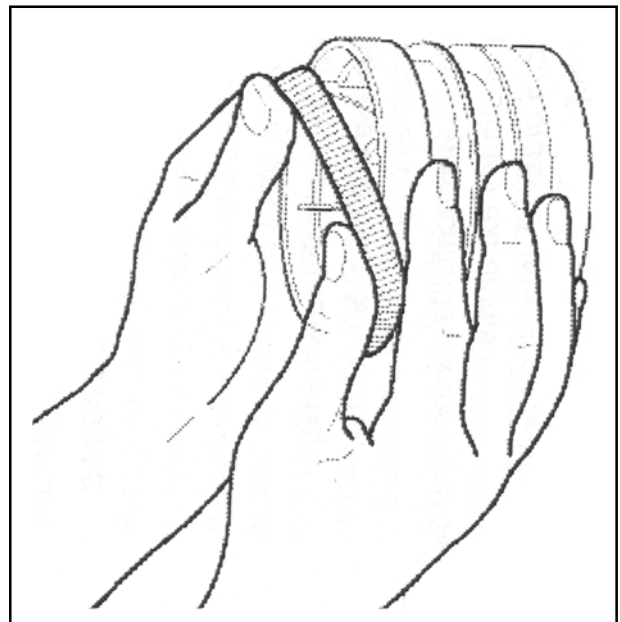


Figure 4-1—Drive Pulley Rings

Maintenance (Continued)

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

LOWER DRIVE BELTS

1. Using a 17 mm open end wrench, loosen, but do not remove the lock nut as shown in Figure 4-2.
2. Using a 6 mm hex wrench, loosen tension screw until all belt tension is removed as shown in Figure 5-2.
3. Pull out belt splicing pin.
Tip: The old belt may be used to install the new belt. Attach the new belt to the old belt and pull the new belt into the position while removing the old belt.
4. If the old belt cannot be used to install a new belt, remove the upper drive cover. If using the old belt, continue with the next step.
5. Place new belt over pulleys with laced splice at top.
6. Insert splicing pin.
Important: Pin must not extend beyond edge of belt.
7. Adjust belt tension as explained in "Adjustments—Box Drive Belt Tension."

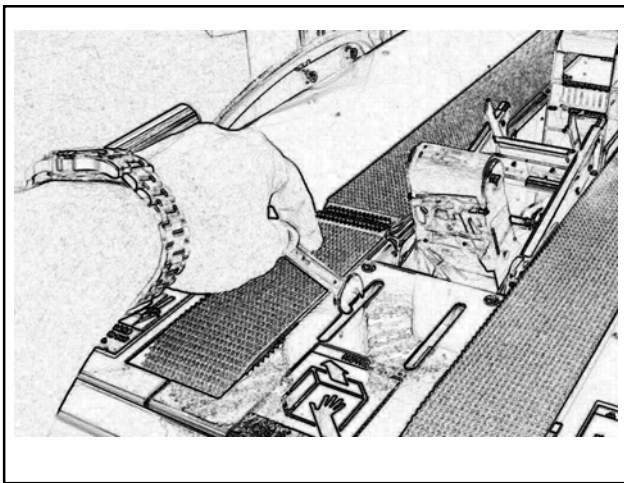


Figure 4-2—Lower Drive Belt Replacement

UPPER DRIVE BELTS

1. Using a 17 mm open end wrench, loosen, but do not remove the lock nut as shown in Figure 4-3.
2. Using a 6 mm hex wrench, loosen tension screw until all belt tension is removed as shown in Figure 5-3.
3. Move compression roller assembly out to full open position (If installed).
4. Pull out belt splicing pin.
Tip: The old belt may be used to install the new belt. Attach the new belt to the old belt and pull the new belt into the position while removing the old belt.
5. If the old belt cannot be used to install a new belt, remove the upper drive cover. If using the old belt, continue with the next step.
6. Place new belt over pulleys with laced splice at top.
7. Insert splicing pin.
Important: Pin must not extend beyond edge of belt.
8. Adjust belt tension as explained in "Adjustments—Box Drive Belt Tension."

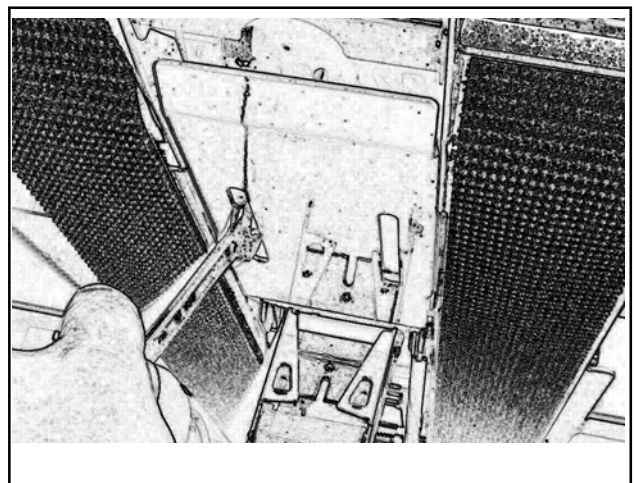


Figure 4-3—Upper Drive Belt Replacement

Adjustments

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

Box Drive Belt Tension

The four continuously moving drive belts convey boxes through the tape applying mechanism. The box drive belts are powered by electric motors.

Tension adjustment of these belts may be required during normal operation. Belt tension must be adequate to positively move the box through the machine and the belts should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end are adjusted in or out to provide proper belt tension. Each belt is adjusted separately.

Belt tension is obtained by tightening the adjustment screw so that a moderate pulling force of 3.5 kg [7 lbs.] applied at the midspan, as shown in Figure 5-1, will deflect the belt 25 mm [1 inch]. This ensures positive contact between the belt and the drive pulley on the discharge end of the drive assembly. Figure 5-1 illustrates the lower drive belts. The upper drive belts are adjusted in the same manner.

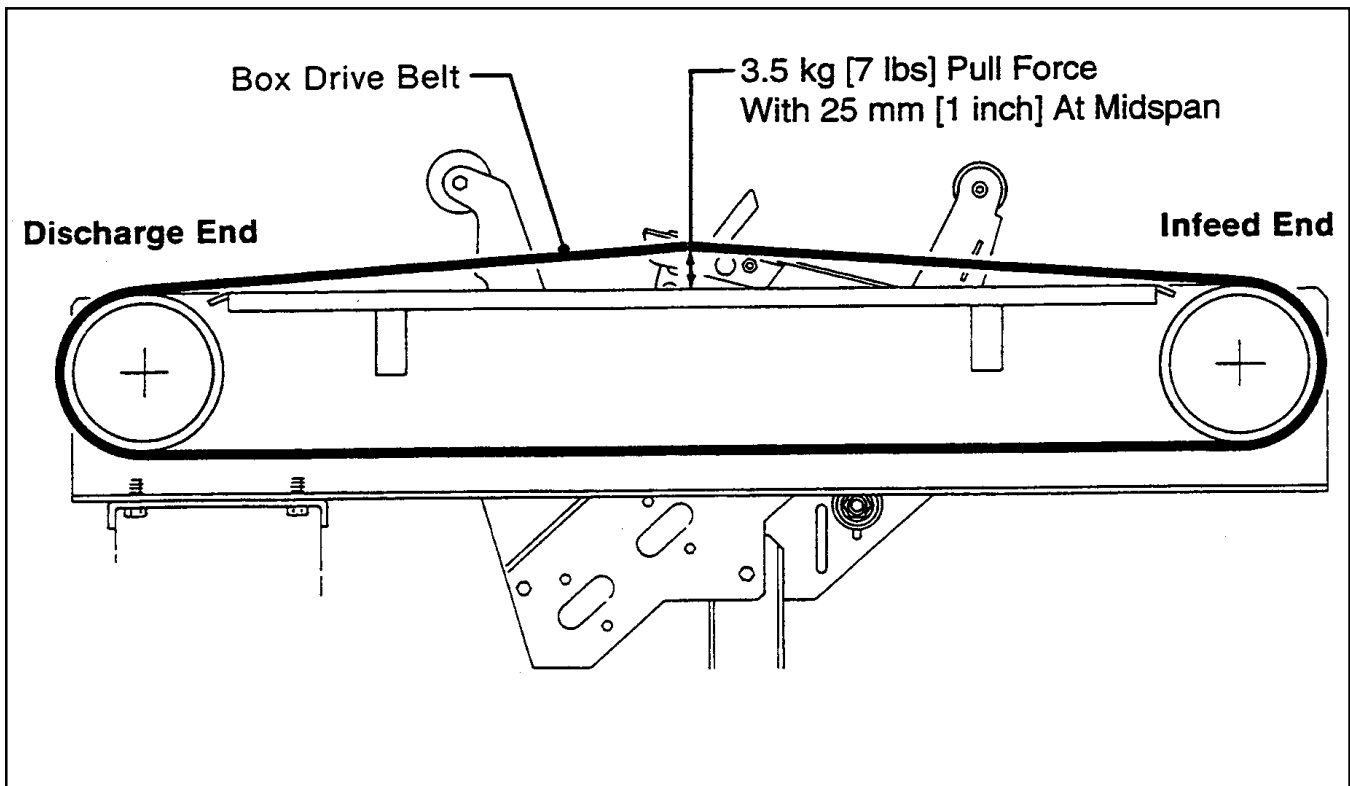


Figure 5-1—Box Drive Belt Tension Adjustment

Adjustments (Continued)

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

Refer to Figures 5-2 and 5-3 and adjust belt tension as follows:

1. Using a 17 mm open end wrench, loosen, but do not remove, the M10 lock nut. Refer to Figures 4-2 and 4-3.
2. Reset the tension on the drive belts as needed. Using a 6 mm long shank hex wrench (approximately 9 inches [230 mm] long), adjust the M8 tension screws in (clockwise) to increase tension or out (counterclockwise) to decrease tension.
3. Tighten the M10 lock nut to secure the tension setting.

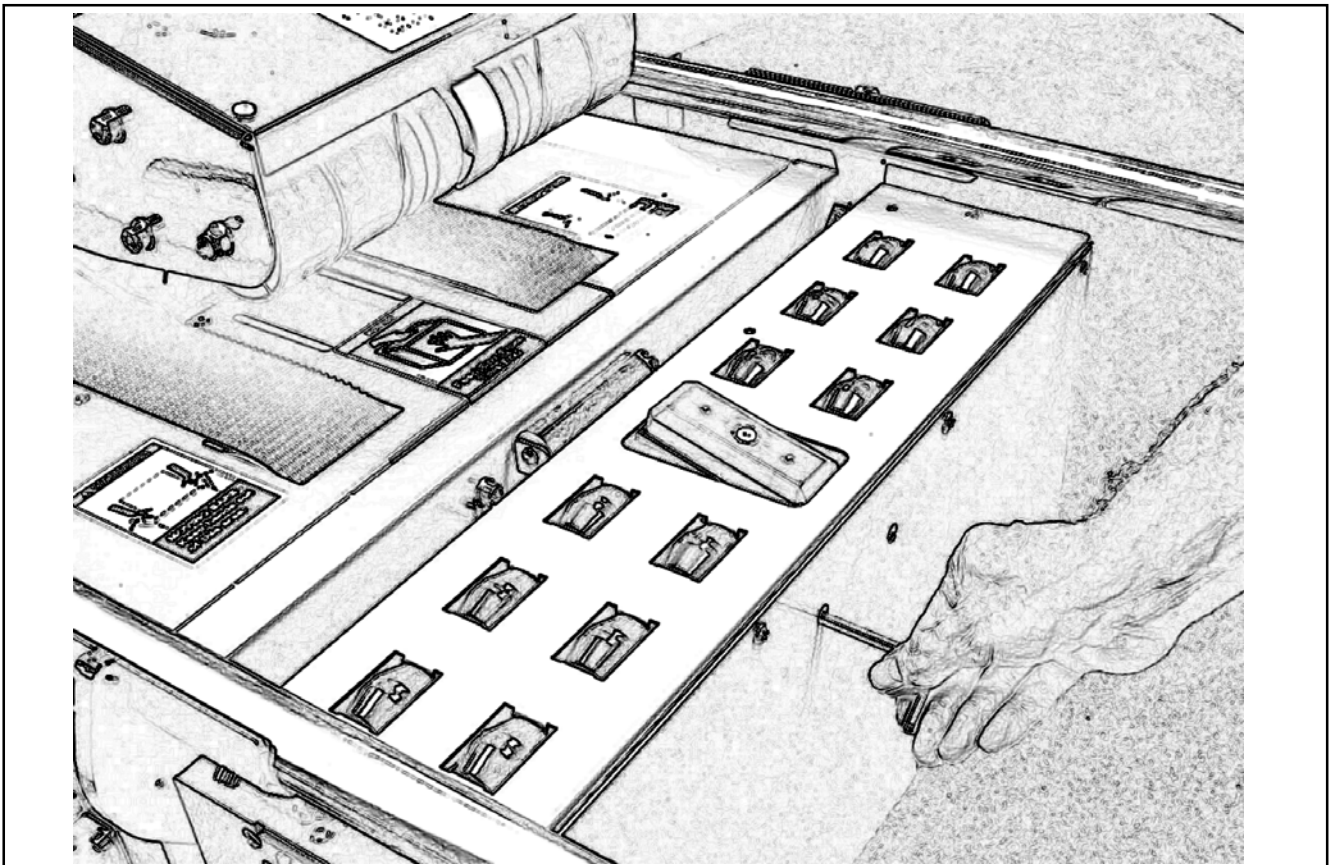


Figure 5-2—Box Drive Belt Tension Adjustment, Lower Belts (Infeed End)

Adjustments (Continued)

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
 - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

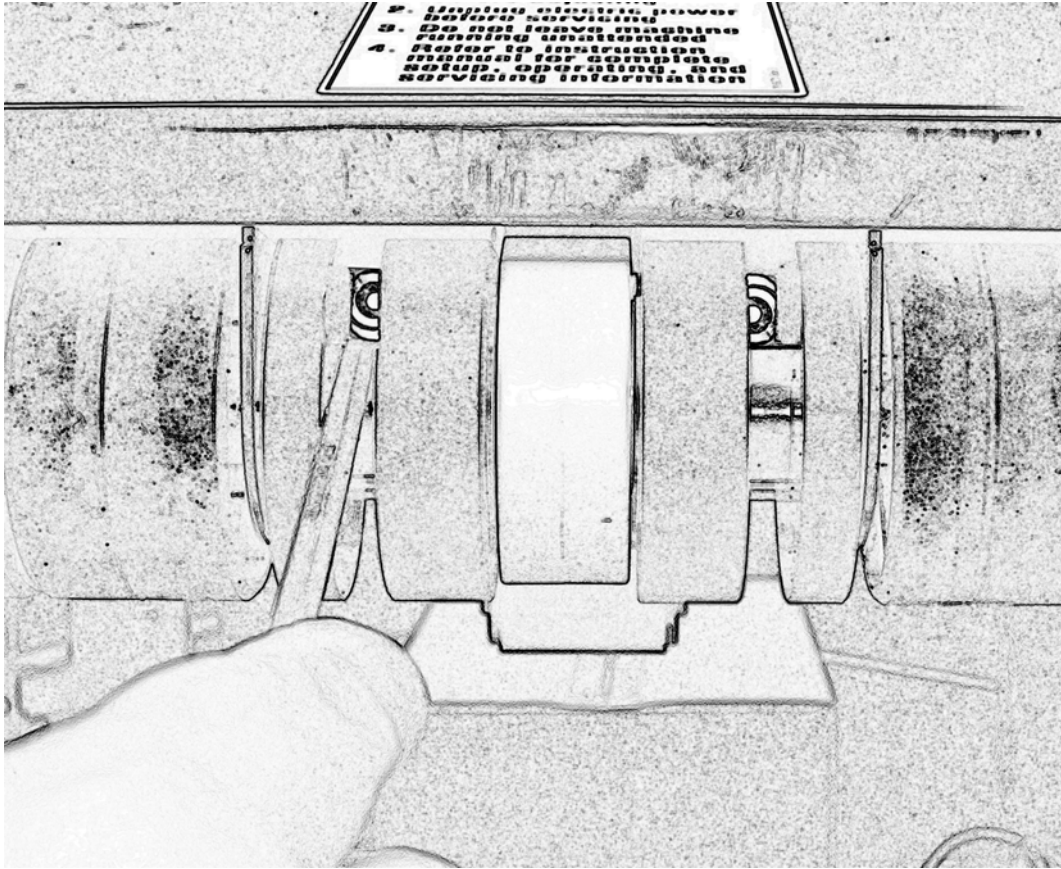


Figure 5-3—Box Drive Belt Tension Adjustment, Upper Belts (Infeed End)

Taping Head Adjustments: Refer to Section II

WARNING

- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

TAPE WEB ALIGNMENT: Section II

TAPE DRUM FRICTION BRAKE: Section II

APPLYING MECHANISM SPRING: Section II

ONE-WAY TENSION ROLLER: Section II

TAPE LEG LENGTH ADJUSTMENT: Section II

Adjustments (Continued)



WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Allow only properly trained and qualified personnel to operate and service this equipment.
- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

Centering Rail Timing Adjustment

The centering rails position and hold the box in the center of the infeed conveyor until it contacts the drive belts. A flow control valve located at the front of the machine determines the amount of time that these guides are in contact with the box. This valve is preset at the factory. However, changes to the plant air supply and adjustments to the case sealer pneumatic system for your specific application may alter performance of the centering rails.

The centering rails should close against the box until the drive belts engage and then release the box. Indications of improper operation include the rails moving away from the box before the drive belts pull the box through the machine (short box applications) and the rails moving inward after the box passes through the centering rails.

To adjust the Centering Rail timing, do the following:

1. Turn off the air supply and unplug the power cord.
2. Remove Entrance conveyor (if installed).
3. Remove Infeed Frame Cover Plate.
4. Turn the Flow Regulator knob (Figure 5-5) clockwise slightly to increase the dwell time or counterclockwise slightly to decrease the dwell time.
5. Replace cover temporarily to prevent access to moving parts.
6. Turn on the air supply and plug in the power cord.
7. Run a box through the machine and observe the operation.
8. Repeat steps 1–7 until the centering rails operate properly.
9. Replace Infeed Frame Cover plate and Entrance conveyor (if installed).

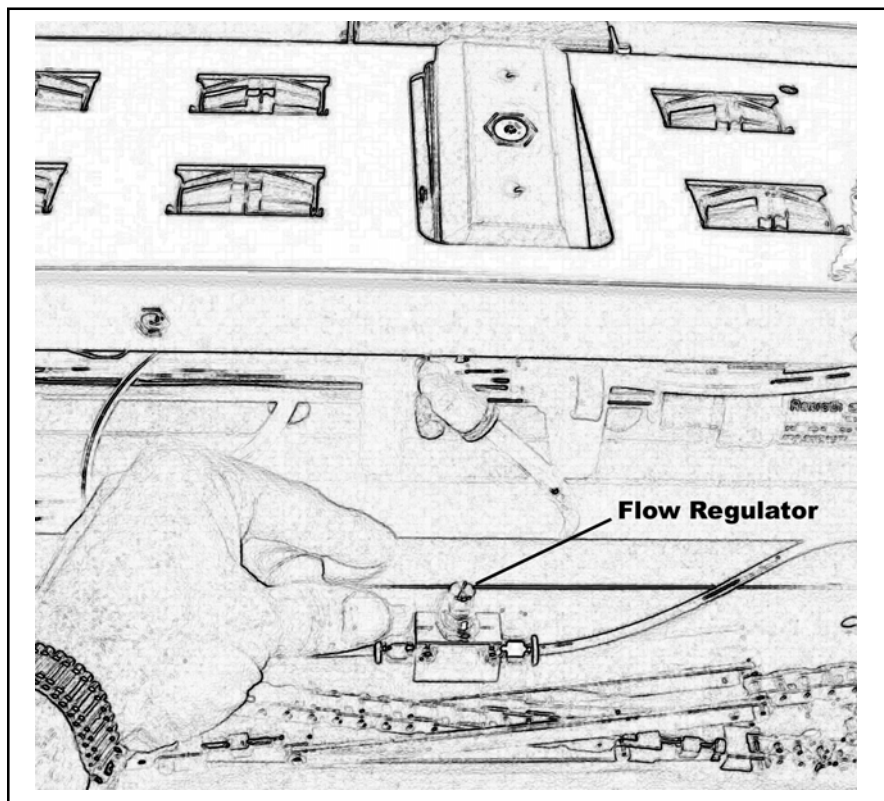


Figure 5-4—Timing Adjustment

Removing Taping Heads

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

- **To reduce the risk associated with sharp blade hazards:**

- Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

WARNING

- **To reduce the risk associated with muscle strain:**

- Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

1. Remove tape from upper taping head and raise upper assembly to a convenient working height.
2. Loosen the thumb screws and move the clamp that secures the upper taping head as shown in Figure 6-1.

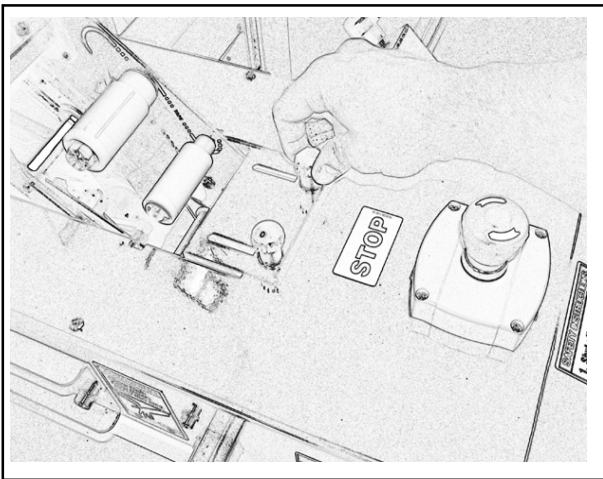


Figure 6-1—Loosen Thumb Screws

3. Slide the taping head forward and lift upward to remove.
4. Raise upper assembly to provide working room around lower taping head and remove tape from taping head.
5. Lift the lower taping head, shown in Figure 6-3 straight up to remove it from the case sealer bed.
7. Replace taping heads in the reverse order of disassembly.

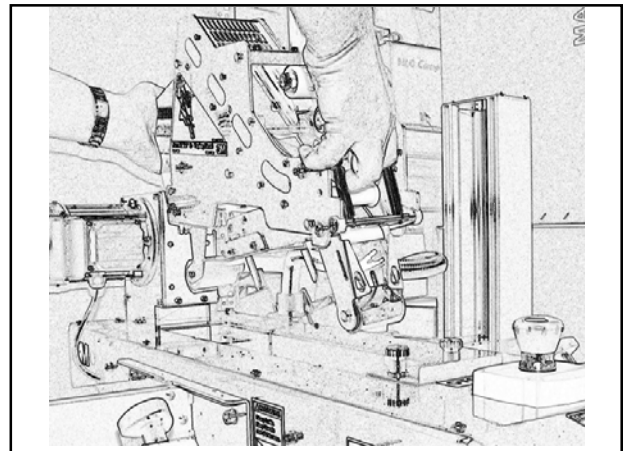


Figure 6-2—Remove Upper Taping Head

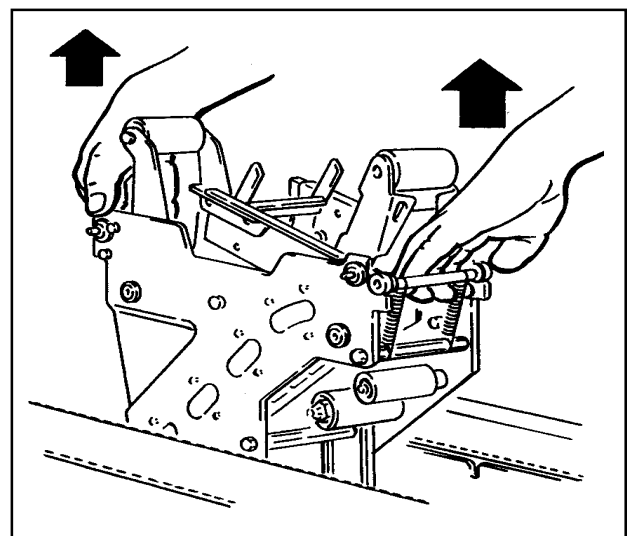


Figure 6-3—Remove Lower Taping Head

Troubleshooting Guide

The Troubleshooting Guide lists some possible machine problems, causes, and corrections. Also see Section II "Troubleshooting" for taping head problems.

Problem	Cause	Correction
Drive belts do not convey boxes	Narrow boxes	Check machine specifications. Boxes are narrower than recommended, causing slippage and premature belt wear.
	Worn drive belts or friction rings	Replace drive belts or friction rings
	Top taping head does not apply enough pressure.	Adjust the box height adjustment using the crank handle
	Top flap compression rollers too tight	Readjust compression rollers
	Taping head applying spring holder missing	Replace spring holder
Drive belts do not turn	Taping head applying spring set too high	Reduce spring pressure
	Worn or missing friction rings	Replace friction rings
	Drive belt tension too low	Adjust belt tension
	Electrical disconnect	Check power and electrical plug
	Circuit breaker not at correct setting	Set to correct current value
Upper and lower taping head mechanisms interfere with each other	Motor not turning	Evaluate problem and correct
	Circuit breaker Motor capacitor Motor fan cover dented	
Upper and lower taping head mechanisms interfere with each other	Machine's minimum height stop does not match tape head leg length setting	Check manual to make sure taping heads match machine setting
Drive belts break	Worn belt Improper setup causing boxes to jam	Replace belt
Light boxes tip back on exit	Upper upper head assembly down too far	Carefully adjust upper upper head assembly
Squeaking noise as boxes pass through machine	Dry compression rollers	Lubricate compression rollers
	Dry column bearings	Lubricate column bearings
	Defective column bearings	Replace column bearings
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Centering guides not centered	Adjust centering guides
	Box flaps of unequal length	Check box specifications

(Continued)

Troubleshooting Guide (Continued)

Problem	Cause	Correction
Upper drive assembly does not move up or moves up slowly	<p>Lower air pressure</p> <p>Defective head raising valve.</p> <p>Work head raising valve actuator</p> <p>Clogged or damaged exhaust mufflers on the upper ends of the head raising cylinders</p> <p>Defective head power valve</p>	<p>Disconnect the air supply. Verify that the main air pressure regulator reads zero. Reconnect air supply and adjust regulator to 70 PSIG (5 bar).</p> <p>Clean or replace head raising valve</p> <p>Replace valve</p> <p>Clean or replace exhaust mufflers</p> <p>Clean or replace the head power valve</p>
Upper taping head does not move down at the end of the taping cycle	<p>Upper drive assembly force adjust regulator set too light</p> <p>Defective top drive assembly force adjust regulator</p> <p>Defective one-way valve</p> <p>Defective head power valve</p>	<p>Turn the upper drive assembly force adjust regulator counterclockwise to increase the force against the top of the box.</p> <p>Replace regulator</p> <p>Clean or replace valve</p> <p>Clean or replace valve</p>
Upper drive assembly moves down too fast or too hard	<p>Upper drive assembly force adjust regulator set too high</p> <p>Defective upper drive assembly force adjust regulator</p> <p>Cushion screw improperly adjusted</p> <p>Cushion screw missing</p>	<p>Turn the upper drive assembly force adjust regulator clockwise to decrease the force against the top of the box.</p> <p>Replace regulator</p> <p>Adjust cushion screw</p> <p>Replace screw</p>
Centering guides move slower than normal.	<p>Centering guide force adjust regulator set too low</p> <p>Centering guide cylinder speed controls not correctly adjusted</p> <p>Defective centering guide power valve</p>	<p>Adjust regulator</p> <p>Adjust speed controls mounted on centering guide cylinder</p> <p>Clean or replace valve</p>

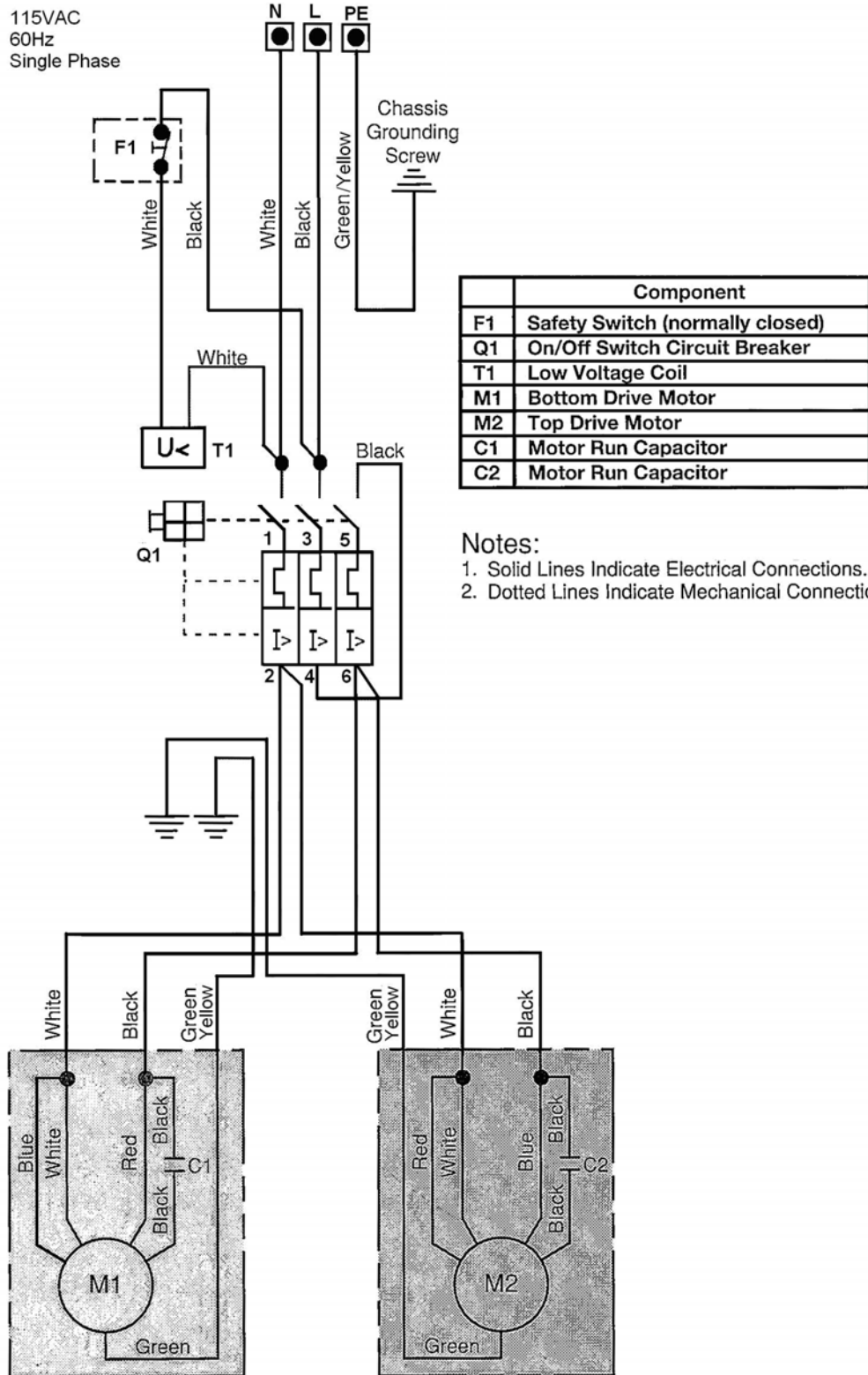
Electrical Diagram



WARNING

• To reduce the risk associated with mechanical and electrical hazards:

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.



Pneumatic Diagram



WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**

- Turn electrical and air supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or taping heads.

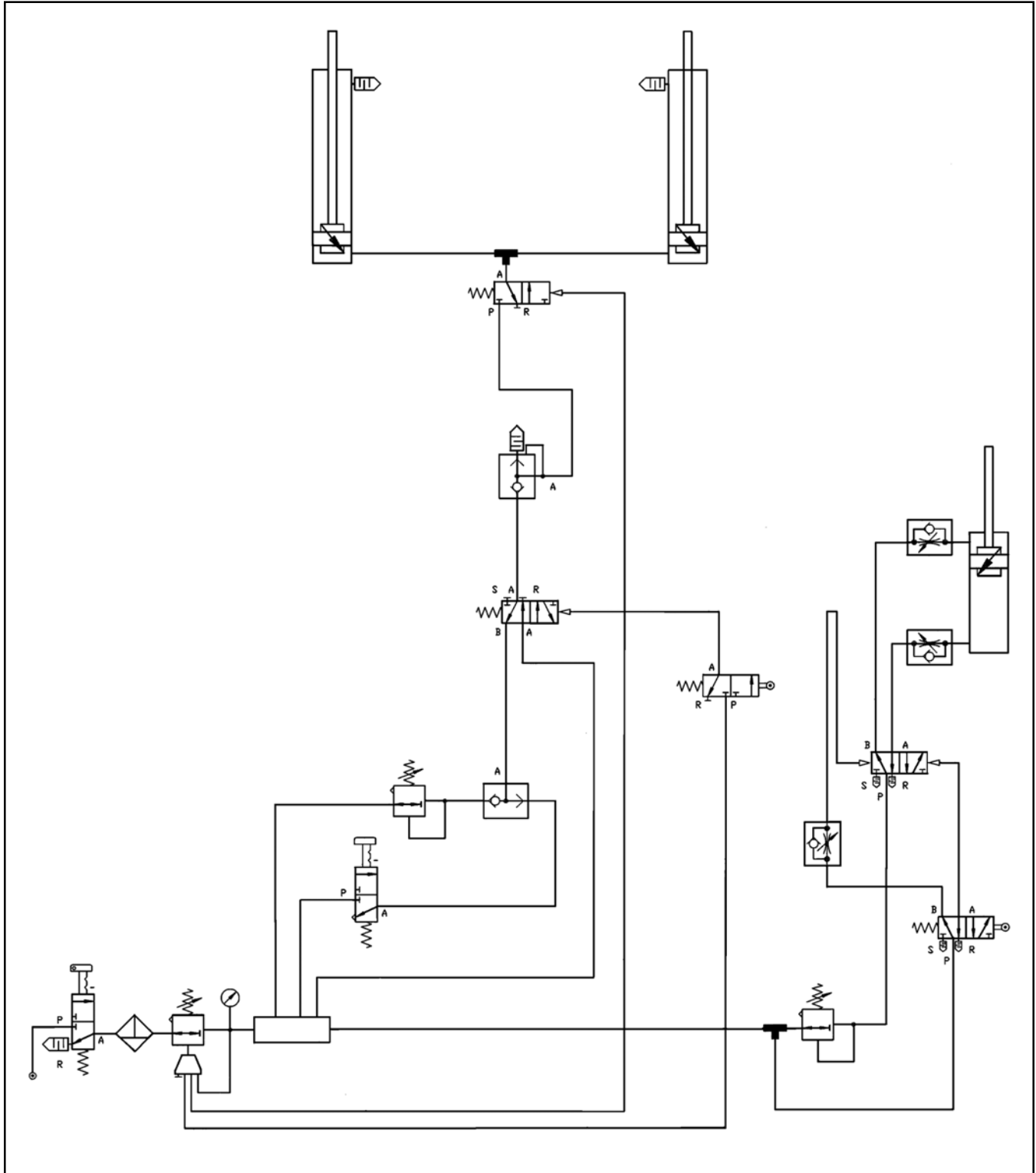


Figure 8-1—Pneumatic Diagram

Replacement Parts and Service Information

Spare Parts

The following parts are normal wear items and should be ordered and kept on hand as required.

Qty.	Ref. No.	Part Number	Description
4	10677-8	78-8070-1531-4	Belt, Drive, with Pin

In addition, a tool and spare parts kit supplied with the r70 Random Case Sealer contains the following spare parts:

Qty.	Ref. No.	Part Number	Description
1	10387-10 (Sec. II)	78-8070-1274-1	Spring, Upper Extension (Silver)
1	10389-10 (Sec. II)	78-8070-1273-3	Spring, Lower Extension (Black)
2	10391-2 (Sec. II)	78-8017-9173-8	Knife, 65 mm (2.56 inches)
4	10391-12 (Sec. II)	78-8052-6602-6	Spring, Cutter

All the above listed parts can be ordered separately and when used should be ordered and kept on hand for spares.

Refer to Section II for recommended taping head spare parts.

Label Kit

If any labels are damaged or destroyed, they must be replaced to ensure operator safety. A label kit (part number 78-8137-1256-5) is available as a stock item. It contains all the safety labels used on the r70 Random Case Sealer.

Tool Kit

A tool kit, part number 78-8098-8868-4, is available for the machine. The kit contains the necessary open end and hex socket wrenches for use with the metric fasteners on the case sealer. The threading tool, part number 78-8076-4726-4, contained in above kit is also available as a replacement stock item.

Replacement Parts Ordering Information and Service

Refer to the first page of this instruction manual "Replacement Parts and Service Information".

Options and Accessories

For additional information on the options and accessories listed below, contact your 3M Representative.

Part Number	Option/Accessory
70-0064-2998-2	Caster Kit Attachment
70-0064-2999-0	Conveyor Extension Attachment (exit only)
70-0064-0353-2	AccuGlide™ 2+ STD 2 Inch Upper Taping Head, Type 10500
70-0064-0354-0	AccuGlide™ 2+ STD 2 Inch Lower Taping Head, Type 10500
70-0064-3000-6	Compression Roller Kit
78-8098-8868-4	Tool and Parts Kit
78-8076-4834-6	6 mm Long Shank hex wrench

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Replacement Parts – Illustrations and Parts Lists

r70 Random Case Sealer, Type 10700 Frame Assemblies

To Order Parts:

1. Refer to first illustration, **Frame Assemblies**, for the **Figure Number** that identifies a specific portion of the machine.
2. Refer to the appropriate **Figure or Figures** to determine the parts required and the parts reference number.
3. The Parts List that follows each illustration, includes the **Reference Number**, **Part Number**, and **Part Description** for the parts on that illustration.

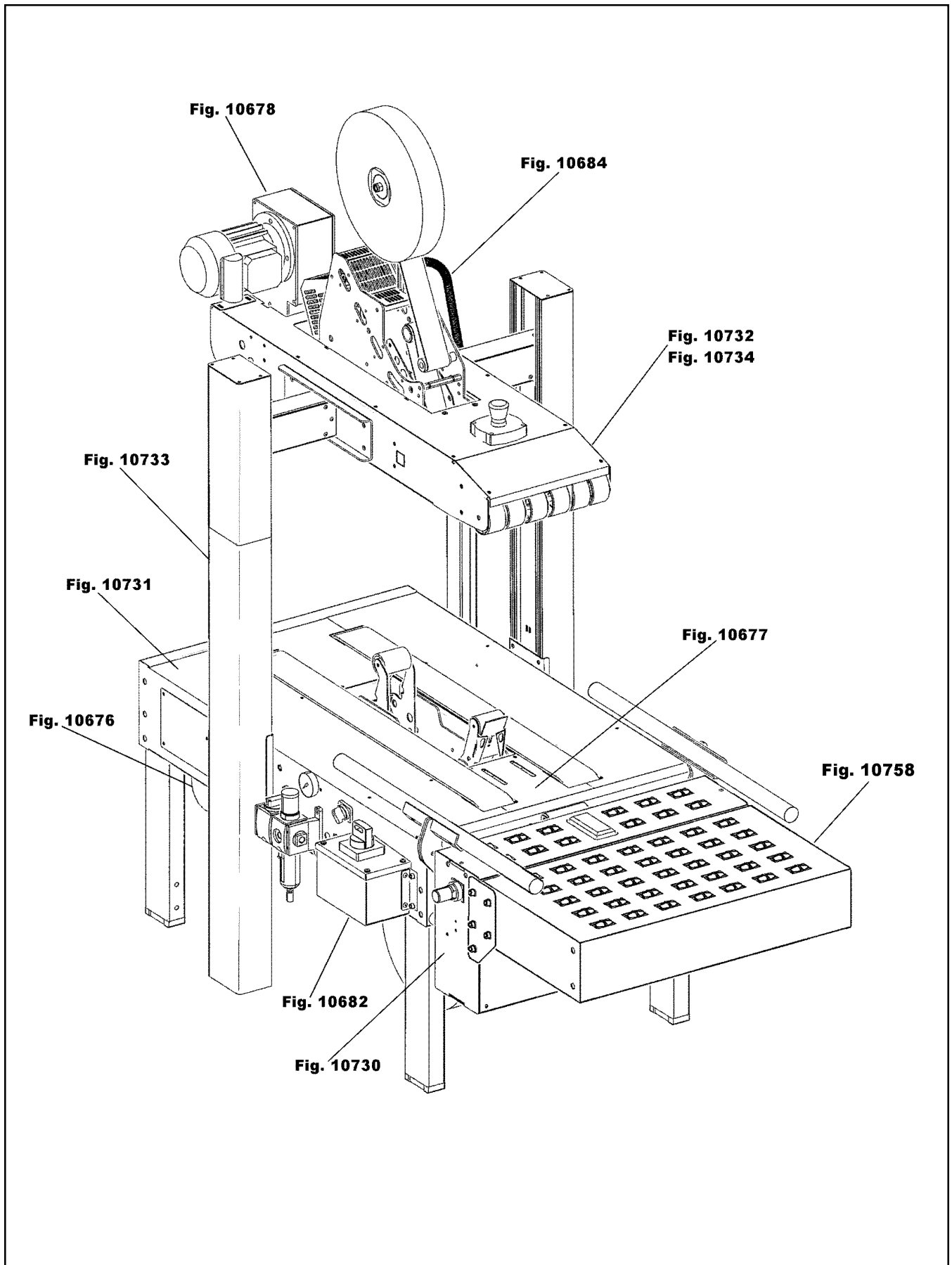
Note: The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, if desired.

4. Order parts by **Part Number**, **Part Description**, and **Quantity** required. Also include machine name, number, and type.
- 5.. Refer to the first page of this instruction manual “**Replacement Parts and Service Information**” for replacement parts ordering information.

IMPORTANT – Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on special order. Contact 3M/Tape Dispenser Parts to confirm item availability.

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Frame Assemblies

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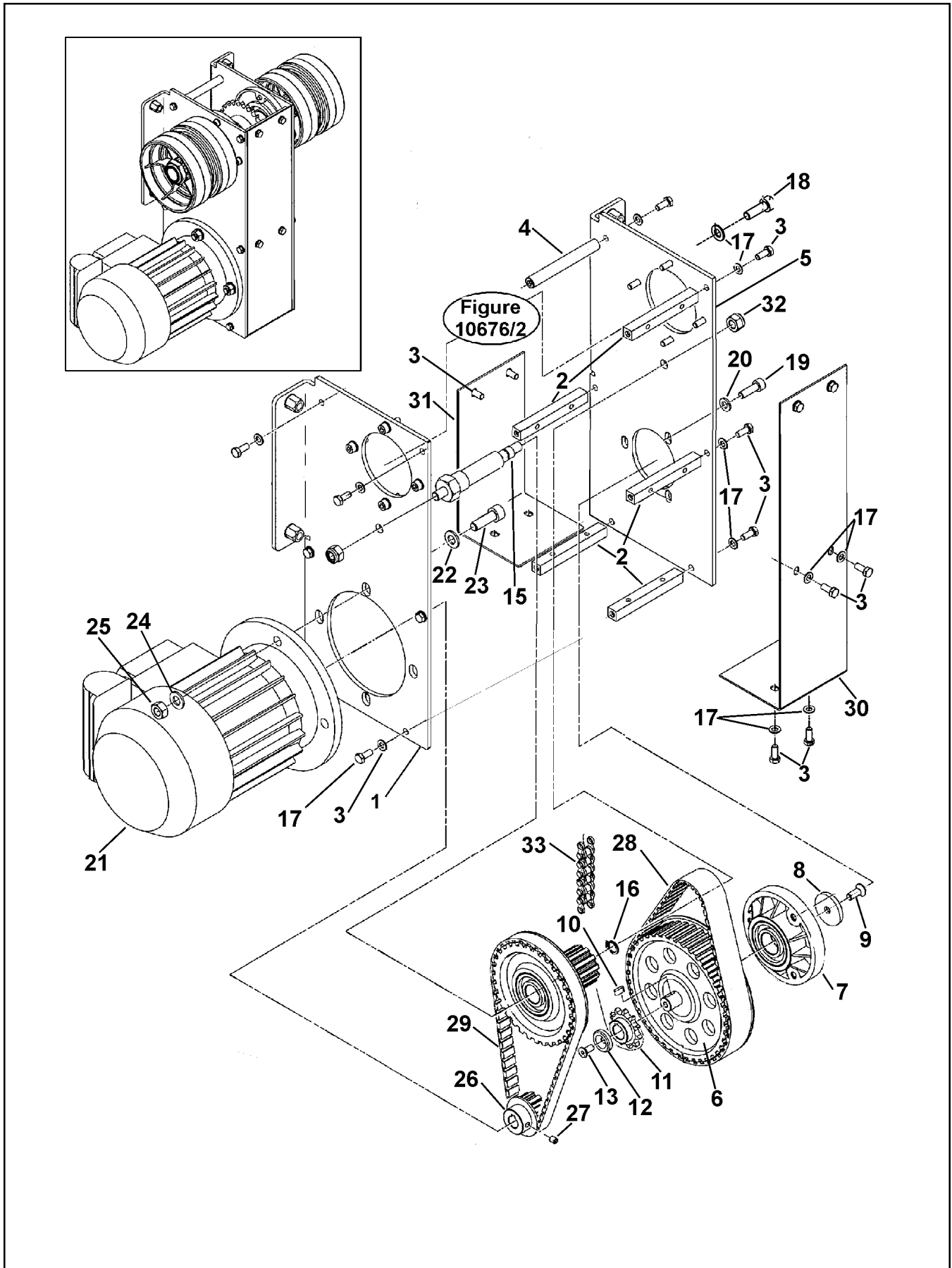


Figure 10676/1

Figure 10676/1

Ref. No.	3M Part No.	Description
10676/1-1	78-8137-0653-4	Frame, L/H Gearbox
10676/1-2	78-8054-8977-6	Spacer
10676/1-3	78-8054-8975-0	Spacer
10676/1-4	26-1003-5820-4	Screw, Special, M5
10676/1-5	78-8137-0654-2	Frame, R/H Gearbox
10676/1-6	78-8054-8980-0	Pulley Timing Belt
10676/1-7	78-8054-8979-2	Housing, Bearing
10676/1-8	78-8054-8577-4	Washer, Special
10676/1-9	26-1001-9843-6	Screw, Flat, M6
10676/1-10	78-8028-8244-5	Key
10676/1-11	78-8054-8981-8	Sprocket
10676/1-12	78-8054-8877-8	Washer
10676/1-13	26-0001-5862-1	Screw, M5
10676/1-14	78-8054-8978-4	Pulley, with Bearing
10676/1-15	78-8076-4531-8	Shaft, Timing Pulley
10676/1-16	78-8016-5855-6	E-Ring
10676/1-17	78-8005-5741-1	Washer, Flat, M5
10676/1-18	78-8032-0382-3	Screw, Special, M5
10676/1-19	78-8010-7193-3	Screw, Special, M6
10676/1-20	78-8042-2919-9	Washer, Triple, M6
10676/1-21	78-8046-8267-8	Motor
10676/1-22	26-1004-5507-5	Washer, M8
10676/1-23	78-8017-9301-5	Screw, M8
10676/1-24	78-8005-5736-1	Lockwasher,, M8
10676/1-25	26-1003-6904-5	Nut, M8
10676/1-26	78-8054-8982-6	Pulley, Timing
10676/1-27	26-1003-8816-9	Screw, Set M5 x 6
10676/1-28	78-8057-5808-9	Belt, Timing 187L100
10676/1-29	78-8057-5724-8	Belt, Timing 187L050
10676/1-30	78-8137-0655-9	Cover, Front
10676/1-31	78-8137-0656-7	Cover, Rear
10676/1-32	78-8076-4580-5	Nut, M8
10676/1-33	78-8054-8987-5	Chain

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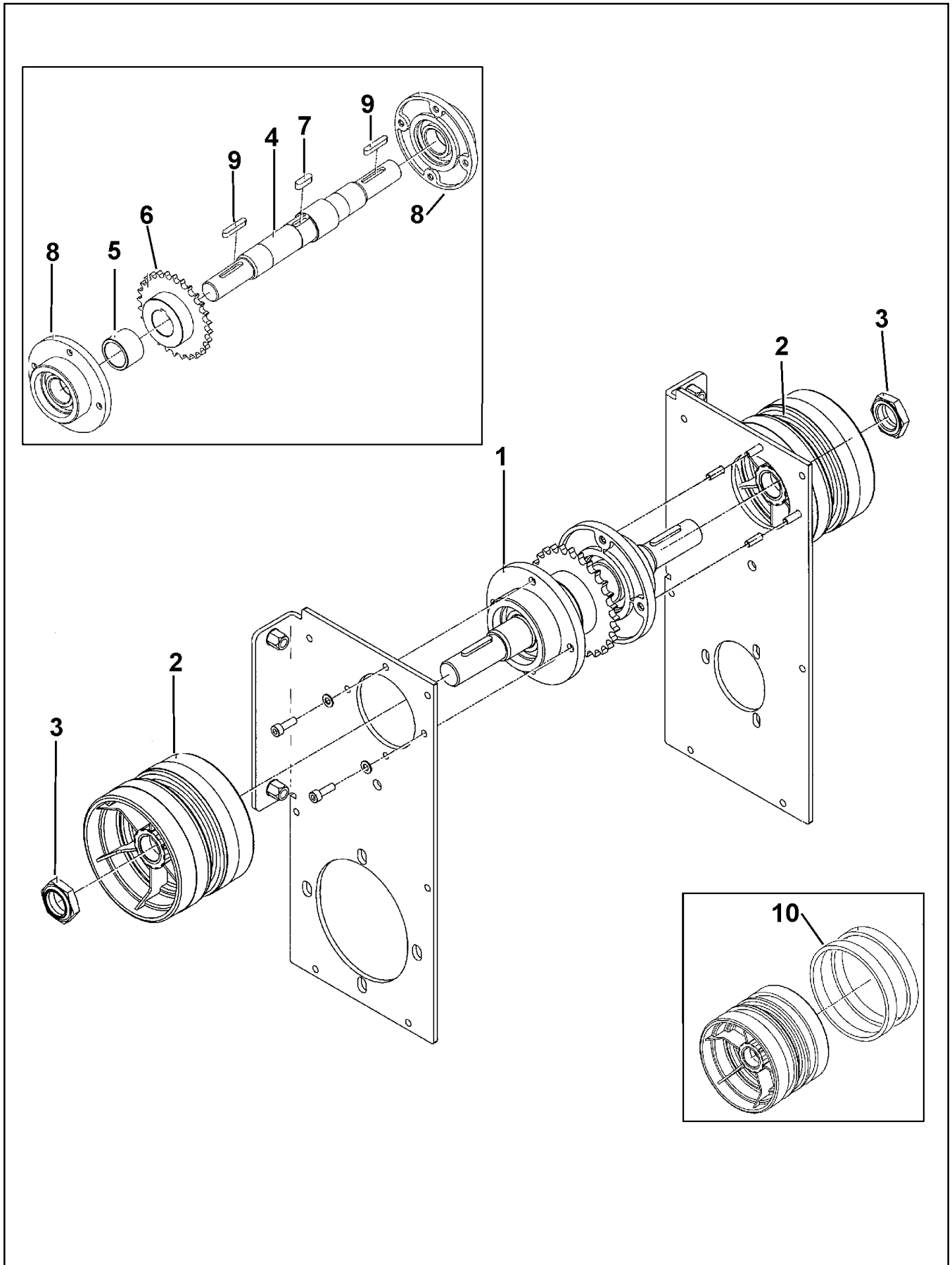


Figure 10676/2

Figure 10676/2

Ref. No.	3M Part No.	Description
10676/2-1	78-8137-0657-5	Drive Shaft
10676/2-2	78-8076-5105-0	Pulley Assembly, Drive
10676/2-3	78-8060-8416-2	Nut, Special M20 x 1
10676/2-4	78-8076-4581-3	Shaft, Gear Box
10676/2-5	78-8054-8984--2	Bushing
10676/2-6	78-8054-8986-7	Sprocket, 3/8" Pitch, 28 Teeth
10676/2-7	78-8057-5811-3	Key, 6 x 6 x 20 mm
10676/2-8	78-8054-8983-4	Flange, Radial Ball Bearing
10676/2-9	78-8057-5739-6	Key, M5 x 5 x 30 mm
10676/2-10	78-8052-6713-1	Ring, Polyurethane

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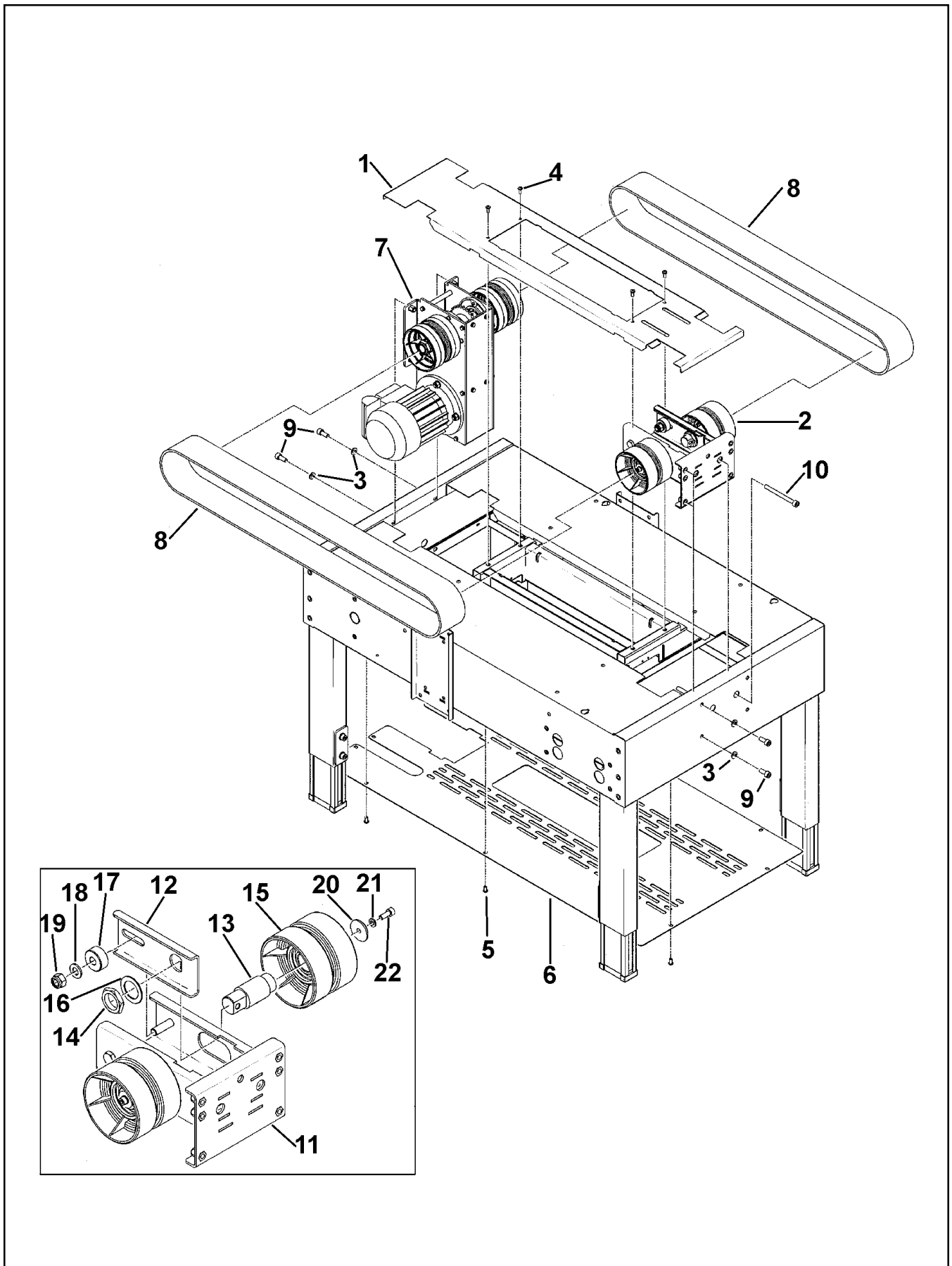


Figure 10677

Figure 10677

Ref. No.	3M Part No.	Description
10677-1	78-8137-0658-3	Conveyor
10677-2	78-8137-0659-1	Tension Belts, Assembly
10677-3	78-8017-9318-9	Washer, 8 mm
10677-4	78-8094-6145-8	Screw, Phillips M5
10677-5	78-8076-4503-7	Screw, M6
10677-6	78-8137-0660-9	Cover
10677-7	78-8137-0661-7	Gear Box, Assembly
10677-8	78-8070-1531-4	Belt, with Hook
10677-9	26-1003-7964-8	Screw, M8
10677-10	78-8114-4633-1	Screw, Hex. Soc. Hd., M8 x 100
10677-11	78-8137-0663-3	Tension Belt, Support
10677-12	78-8137-0664-1	Plate
10677-13	78-8137-0665-8	Shaft, Pulley
10677-14	78-8137-0666-6	Nut, Special, M25
10677-15	78-8052-6710-7	Roller
10677-16	78-8137-0667-4	Washer, Flat, M25
10677-17	78-8070-1518-1	Spacer, Shaft
10677-18	26-1004-5510-9	Washer, Flat, M10
10677-19	26-1003-6918-5	Nut, Plastic Insert M10
10677-20	78-8052-6709-9	Washer, Special
10677-21	78-8010-7435-8	Washer, M6
10677-22	26-1003-7957-2	Screw, M6

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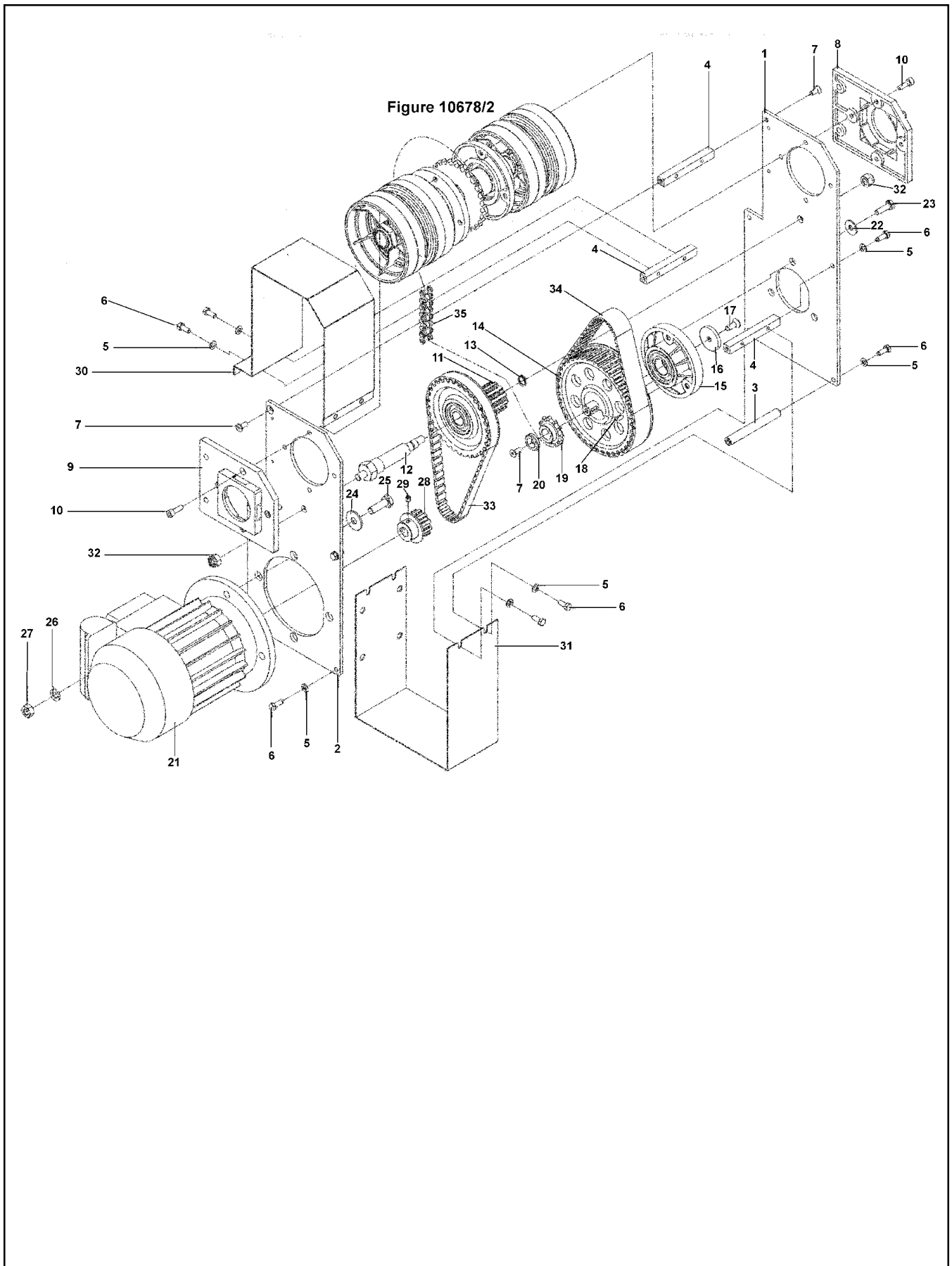


Figure 10678/1

Figure 10678/1

Ref. No.	3M Part No.	Description
10678/1-1	78-8091-0790-3	Frame, L/H
10678/1-2	78-8091-0789-5	Frame, R/H
10678/1-3	78-8054-8975-0	Spacer
10678/1-4	78-8054-8977-6	Spacer
10678/1-5	78-8005-5741-1	Washer, Flat, M5
10678/1-6	26-1003-5820-4	Screw, Hex Hd. M5 x 12
10678/1-7	26-0001-5862-1	Screw, Flat Soc. Hd., M5 x 12
10678/1-8	78-8076-4585-4	Support, Right, Bearing
10678/1-9	78-8076-4586-2	Support, Left, Bearing
10678/1-10	78-8032-0382-3	Screw, Hex. Soc. Hd., M5 x 16 Zinc. Pl
10678/1-11	78-8054-8978-4	Pulley with Bearing 6203-2RS/17
10678/1-12	78-8076-4531-8	Shaft, Timing Pulley
10678/1-13	78-8016-5855-6	E-Ring, 10 mm
10678/1-14	78-8054-8980-0	Pulley, Timing Belt
10678/1-15	78-8054-8979-2	Housing, Bearing
10678/1-16	78-8054-8577-4	Washer, Special
10678/1-17	26-1001-9843-6	Screw Flat Soc. Hd., M6 x 16
10678/1-18	78-8028-8244-5	Key, 4 x 4 x 10 mm
10678/1-19	78-8054-8981-8	Sprocket, 3/8 Pitch, 11 Teeth
10678/1-20	78-8054-8877-8	Washer, 5, 5/20 x 4
10678/1-21	78-8046-8267-8	Motor, 110/110 V, 50/60 Hz
10678/1-22	78-8042-2919-9	Washer, Triple, M6
10678/1-23	78-8010-7193-3	Screw, Metric, M6 x 20, Hex. Hd.
10678/1-24	26-1004-5507-5	Washer M8
10678/1-25	78-8017-9301-5	Screw, Hex Head, M8 x 25
10678/1-26	78-8005-5736-1	Lockwasher, for M8 Screw
10678/1-27	26-1003-6904-5	Nut, Hex, M8
10678/1-28	78-8054-8982-6	Pulley, Timing 11 Teeth
10678/1-29	26-1003-8816-9	Screw, Set, M5 x 6
10678/1-30	78-8091-0598-0	Cover, Gearbox
10678/1-31	78-8091-0713-5	Cover, Upper
10678/1-32	78-8076-4580-5	Nut, Self-Locking, M8

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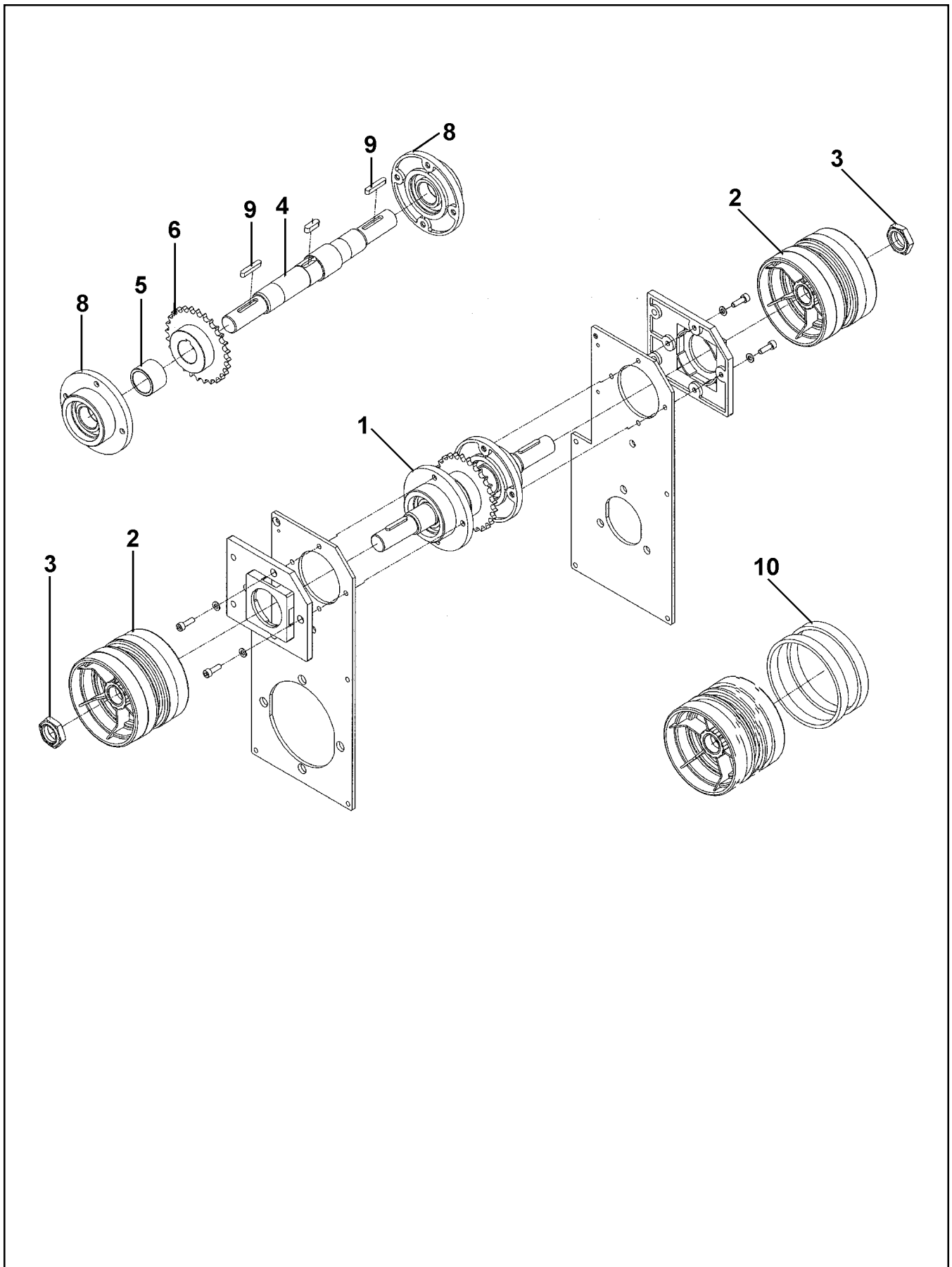


Figure 10678/2

Figure 10678/2

Ref. No.	3M Part No.	Description
10678/2-1	78-8137-0657-5	Shaft Assembly
10678/2-2	78-8076-5105-0	Pulley Assembly, Drive
10678/2-3	78-8060-8416-2	Nut, Special, M20 x 1
10678/2-4	78-8076-4581-3	Shaft, Gear Box
10678/2-5	78-8054-8984-2	Bushing
10678/2-6	78-8054-8986-7	Sprocket, 3/8" Pitch, 28 Teeth
10678/2-7	78-8057-5811-3	Key, 6 x 6 x 20 mm
10678/2-8	78-8054-8983-4	Flange, Radial Ball Bearing
10678/1-9	78-8057-5739-6	Key, M5 x 5 x 30 mm
10678/2-10	78-8052-6713-1	Ring, Polyurethane

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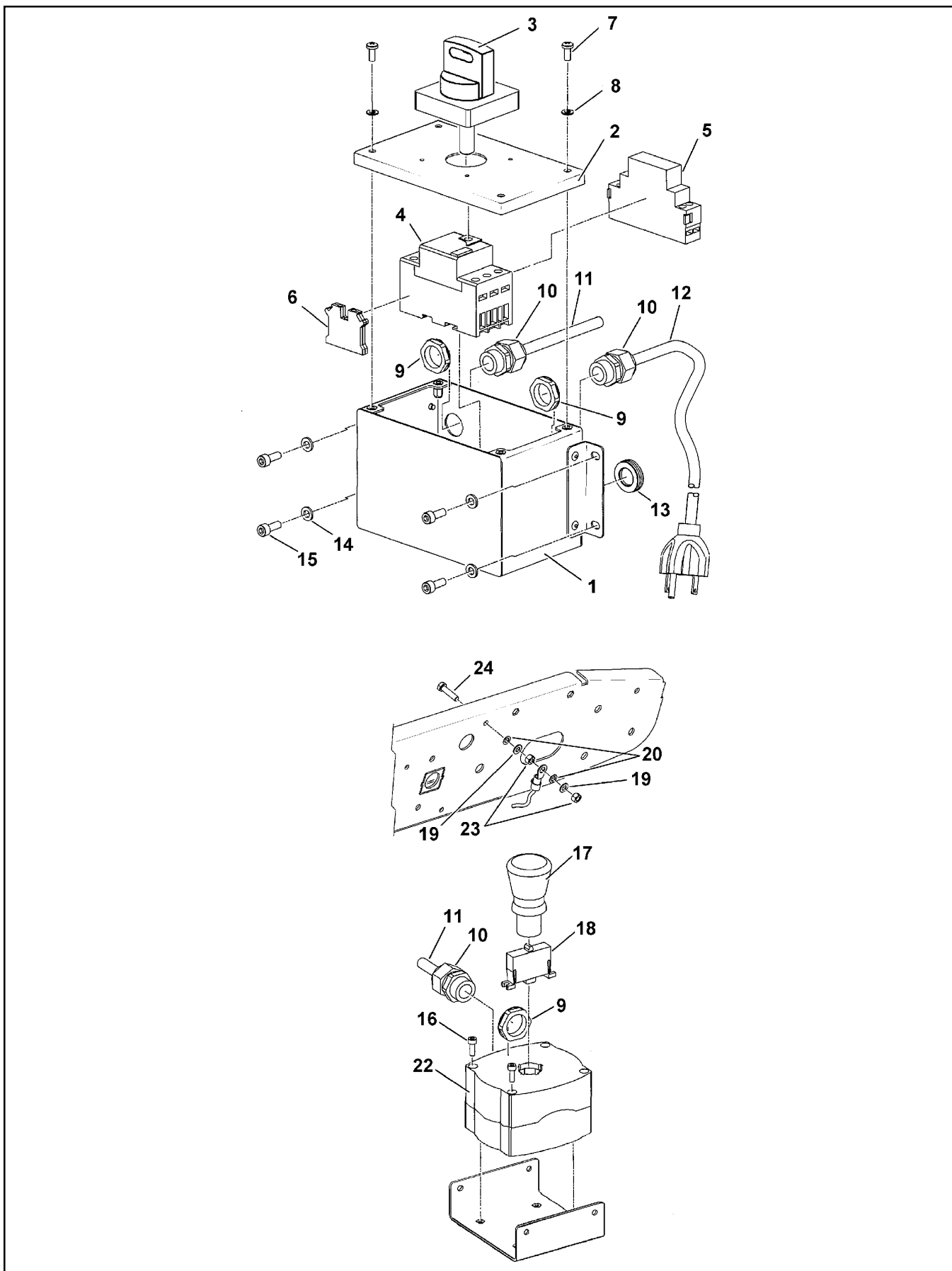


Figure 10682

Figure 10682

Ref. No.	3M Part No.	Description
10682-1	78-8137-0601-3	Box, Switch
10682-2	78-8137-0602-1	Cover, Box, Switch
10682-3	78-8137-0606-2	Lockable, Twist Knob, Allen Bradley
10682-4	78-8137-0603-9	Switch, Terminal, Allen Bradley, 2.5-4 A
10682-5	78-8137-0604-7	Coil, Under Voltage 120 V 60 Hz 140M-C-UCD
10682-6	78-8094-6384-3	Terminal
10682-7	78-8094-6145-8	Screw, Phillips, M5 x 12
10682-8	78-8005-5741-1	Washer, Flat, M5
10682-9	78-8129-6469-6	Nut, Special, M20 x 1.5
10682-10	78-8137-0607-0	Grip, Cord, Skintop
10682-11	78-8060-8053-3	Wire, 3-Pole, 5 Meters Length
10682-12	78-8028-7909-4	Power Cord U.S.A.
10682-13	78-8060-7785-1	Plug
10682-14	26-1000-0010-3	Washer, Flat M6
10682-15	26-1003-7957-2	Screw, Soc. Hd. Hex Hd. M6 x 16
10682-16	78-8137-0608-8	Box, E-Stop, Yellow, Allen Bradley
10682-17	78-8137-0609-6	Switch, E-Stop, 40 800FM-MT44
10682-18	78-8137-0610-4	Terminal Switch
10682-19	26-1003-7943-2	Screw, Soc. Hd. M4 x 12
10682-20	78-8060-8488-1	Screw, Hex.Hd. M5 x 20
10682-21	78-8137-0611-2	Washer, Safety "S" (Schnorr) 5 F144
10682-22	78-8005-5741-1	Washer, Flat, M5
10682-23	78-8010-7417-6	Nut, Metric, Hex Stl., M5

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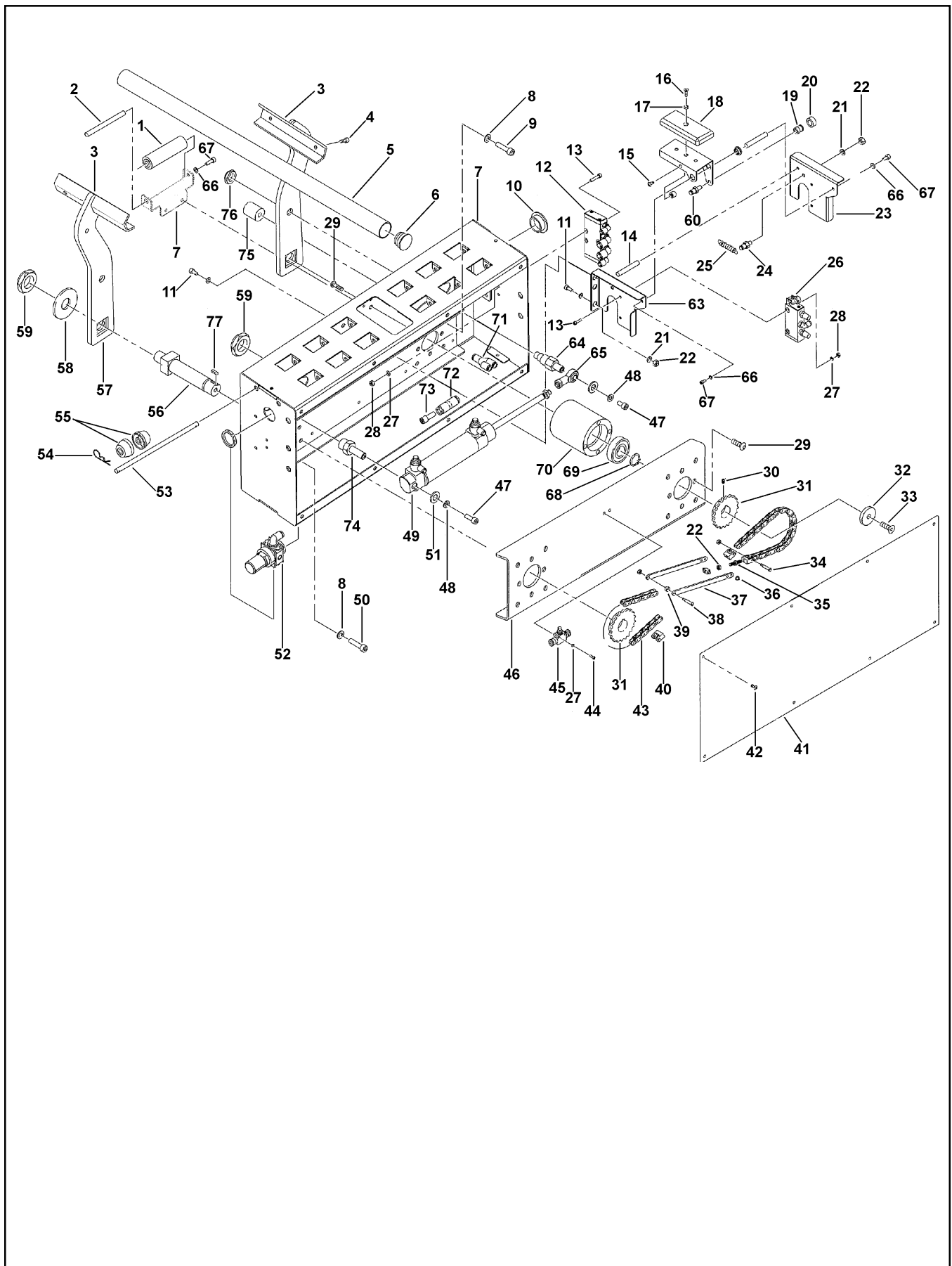


Figure 10730

Figure 10730 (Page 1 of 2)

Ref. No.	3M Part No.	Description
10730-1	78-8137-0746-6	Roller, Tappert
10730-2	78-8137-0747-4	Shaft
10730-3	78-8137-0748-2	Lever, Infeed
10730-4	78-8010-7210-5	Screw, Hex. Soc. Hd., M6 x 20
10730-5	78-8076-4649-8	Guide, Infeed
10730-6	78-8054-8779-6	End, Cap
10730-7	78-8137-0750-8	Frame, Infeed
10730-8	78-8017-9318-9	Washer, Plain, 8 mm
10730-9	78-8137-0751-6	Screw, M8
10730-10	78-8137-0752-4	Caps
10730-11	26-1003-7957-2	Screw, Hex. Soc. Hd., M6 x 16
10730-12	78-8137-0713-6	Valve, Assembly, 5/2 R70
10730-13	26-1003-7946-5	Screw, Soc. Hd., M4 x 25
10730-14	78-8137-0753-2	Shaft
10730-15	78-8017-9257-9	Screw, Phillips, M4 x 10
10730-16	78-8091-0537-8	Screw, Hex, M5 x 25
10730-17	78-8137-0754-0	Nut, Special
10730-18	78-8060-8480-8	Pad, Foot
10730-19	78-8137-0755-7	Support
10730-20	78-8137-0746-5	Rubber, Valve
10730-21	26-1000-0010-3	Washer, Flat M6
10730-22	78-8010-7418-4	Nut, Metric, Hex, STL., M6
10730-23	78-8137-0757-3	Support
10730-24	78-8137-0758-1	Shaft, Spring
10730-25	78-8137-0759-9	Spring
10730-26	78-8137-0722-7	Valve, Assembly 5/2 R70
10730-27	78-8005-5740-3	Washer Plain, Nickel, Metric 4 mm
10730-28	26-1003-6914-4	Nut, Plastic Insert, M4
10730-29	78-8129-6124-7	Screw, Cup Hd., M8 x 16
10730-30	78-8059-5617-0	Set Screw M6 x 8
10730-31	78-8076-4571-4	Sprocket, Z=20
10730-32	78-8054-8588-1	Washer, 8,5/40 x 6
10730-33	78-8057-5716-4	Screw, Flat Soc. Hd., M8 x 15
10730-34	26-1003-5807-1	Screw, Hex Hd., M3 x 20
10730-35	78-8054-8785-3	Rod, Threaded R/L
10730-36	78-8056-3945-3	E-Ring, M4
10730-37	78-8054-8787-9	Chain Link
10730-38	26-1003-5808-9	Screw, Hex Hd., M3 x 25
10730-39	78-8054-8783-8	Washer, Special
10730-40	78-8054-8788-7	Connector, Chain

Figure 10730 (Page 2 of 2)

Ref. No.	3M Part No.	Description
10730-41	78-8137-0760-7	Cover
10730-42	78-8137-0761-5	Screw, M5 x 10
10730-43	78-8054-8777-0	Chain, 3/8" Pitch, 41 Pitch
10730-44	26-1003-7945-7	Screw, Soc. Hd., M4 x 20
10730-45	78-8137-0702-9	Flow Regulator
10730-46	78-8137-0762-3	Frame, Infeed
10730-47	78-8010-7209-7	Screw, Soc. Hd., M6 x 12
10730-48	78-8010-7435-8	Washer, Metric Lock, M6
10730-49	78-8137-0723-5	Lever Cylinder, Assembly
10730-50	26-1003-7964-8	Screw, Hex Soc. Dr. Hd., M8 x 20
10730-51	78-8042-2919-9	Washer, Triple, M6
10730-52	78-8137-0720-1	Reductor, Assembly
10730-53	78-8010-7435-8	Shaft
10730-54	78-8137-0735-9	Pin, Cotter
10730-55	78-8060-7692-9	Roller, Tapered
10730-56	78-8137-0764-9	Shaft
10730-57	78-8137-0765-6	Lever, Infeed
10730-58	78-8137-0766-4	Washer
10730-59	78-8060-8416-2	Nut, Special, M20 x 1
10730-60	78-8137-0767-2	Shaft
10730-61	78-8137-0768-0	Spacer
10730-62	78-8137-0769-8	Shaft
10730-63	78-8137-0770-6	Support
10730-64	78-8137-0771-4	Stud, Joint
10730-65	78-8137-0701-1	Mount, Cylinder Rod End
10730-66	78-8005-5741-1	Washer, Flat, M5
10730-67	26-1003-7948-1	Screw, Hex Soc. Hd., M5 x 10
10730-68	12-7997-0272-0	E-Ring, M-25
10730-69	78-8070-1530-6	Radial Ball Bearing
10730-70	78-8137-0772-2	Spacer
10730-71	78-8114-4704-0	Union, 3140A0800
10730-72	78-8137-0699-7	Joint, Type An 10
10730-73	78-8137-0700-3	Reduction Tube 10/4
10730-74	78-8137-0773-0	Stud, Joint
10730-75	78-8137-0774-8	Spacer
10730-76	78-8091-0555-0	Nut, Special, M12
10730-77	78-8076-4570-6	Key, 6 x 6 x 15

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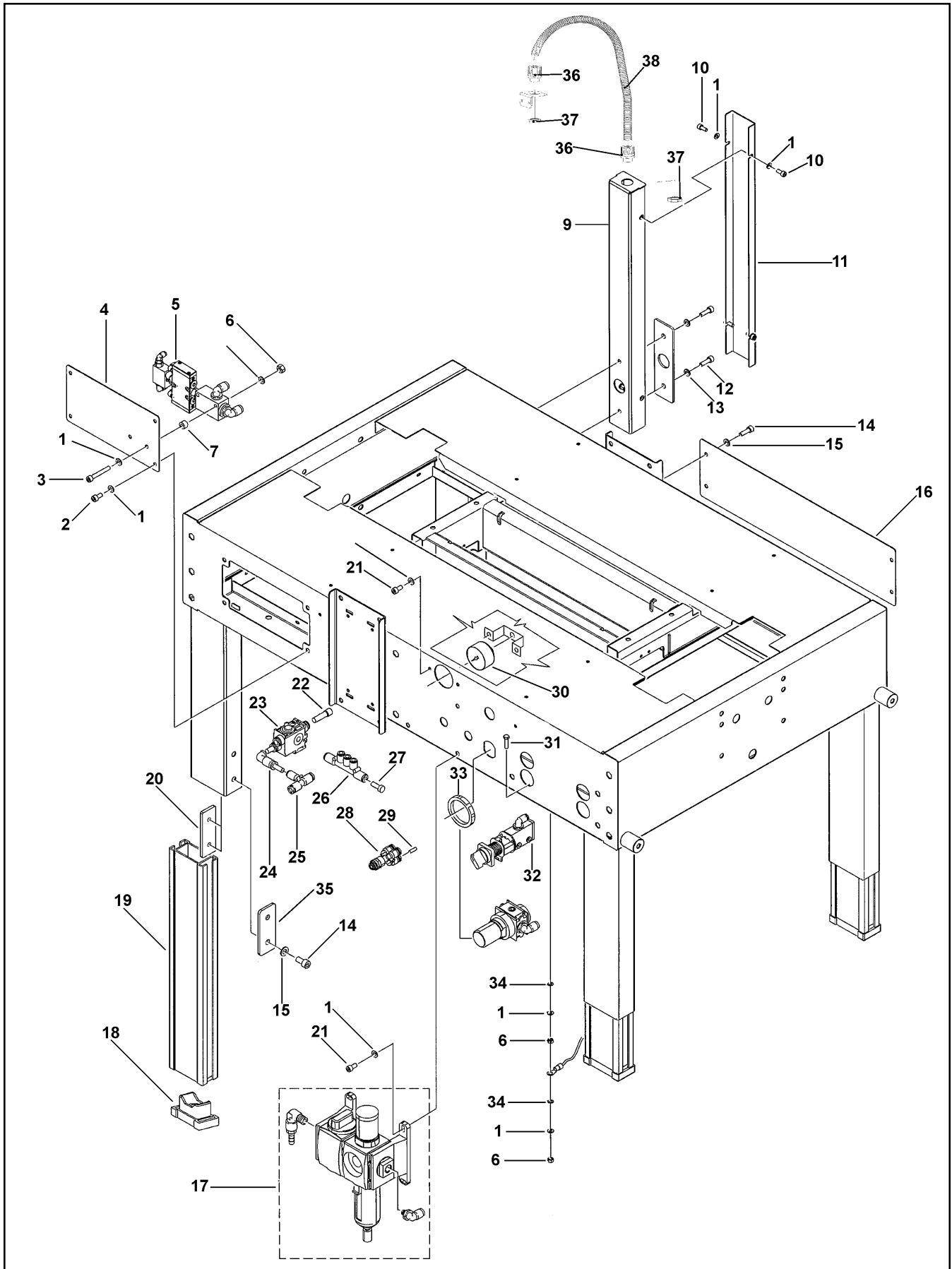


Figure 10731

Figure 10731

Ref. No.	3M Part No.	Description
10731-1	78-8005-5741-1	Washer, Flat, M5
10731-2	26-1003-7949-9	Screw, Hex Soc. Hd., M5 x 12
10731-3	26-1003-7954-9	Screw, M5 x 45
10731-4	78-8137-0743-3	Support, Valve
10731-5	78-8137-0703-7	Valve Assembly 5/2
10731-6	78-8010-7417-6	Nut, Metric, Hex Stl. M5
10731-7	78-8070-1454-9	Spacer, Collar
10731-8	78-8137-0662-5	Rinforz, Housing Wire
10731-9	78-8137-0743-3	Housing, Wire
10731-10	26-1003-5820-4	Screw, Hex Hd., M5 x 12
10731-11	78-8137-0668-2	Cover, Frame
10731-12	26-1003-7957-2	Screw, Hex Soc. Hd., M6 x 16
10731-13	26-1000-0010-3	Washer, Flat, M6
10731-14	26-1003-7963-0	Screw, Soc. Hd., M8 x 16
10731-15	78-8017-9318-9	Washer, Plain, Metric 8 mm
10731-16	78-8137-0744-1	Cover, Frame
10731-17	78-8137-0708-6	Gr. Air Treatment
10731-18	78-8137-0641-9	Foot
10731-19	78-8137-0640-1	Inner, Leg
10731-20	78-8137-0635-1	Plate, Leg
10731-21	78-8032-0382-3	Screw, Soc. Hex. Hd. M5 x 16
10731-22	78-8119-8624-5	Cap, KQP-08
10731-23	78-8137-0697-1	Valve, 3/2, 6 x 1
10731-24	78-8119-8639-3	Union, Elbow, 31820800
10731-25	78-8094-6277-9	Union, TE, 31040800
10731-26	78-8119-8618-7	Union, Multiple, 33041008
10731-27	78-8137-0698-9	Reduction, KQR08-10
10731-28	78-8094-6076-5	Union, Y
10731-29	78-8114-4883-2	Cap, KQP-08
10731-30	78-8091-0423-1	Gauge, with Support
10731-31	78-8060-8488-1	Screw, M5
10731-32	78-8137-0717-7	Valve, 3/2, with R70
10731-33	78-8114-4883-2	Cap, KQP-08
10731-34	78-8046-8217-3	Washer, Special
10731-35	78-8129-6100-7	Bracket
10731-36	78-8137-0670-8	Union, Pa 6 x Sleeve / 23 M25
10731-37	78-8137-0671-6	Union, Sleeve M25
10731-38	78-8137-0672-4	Sleeve

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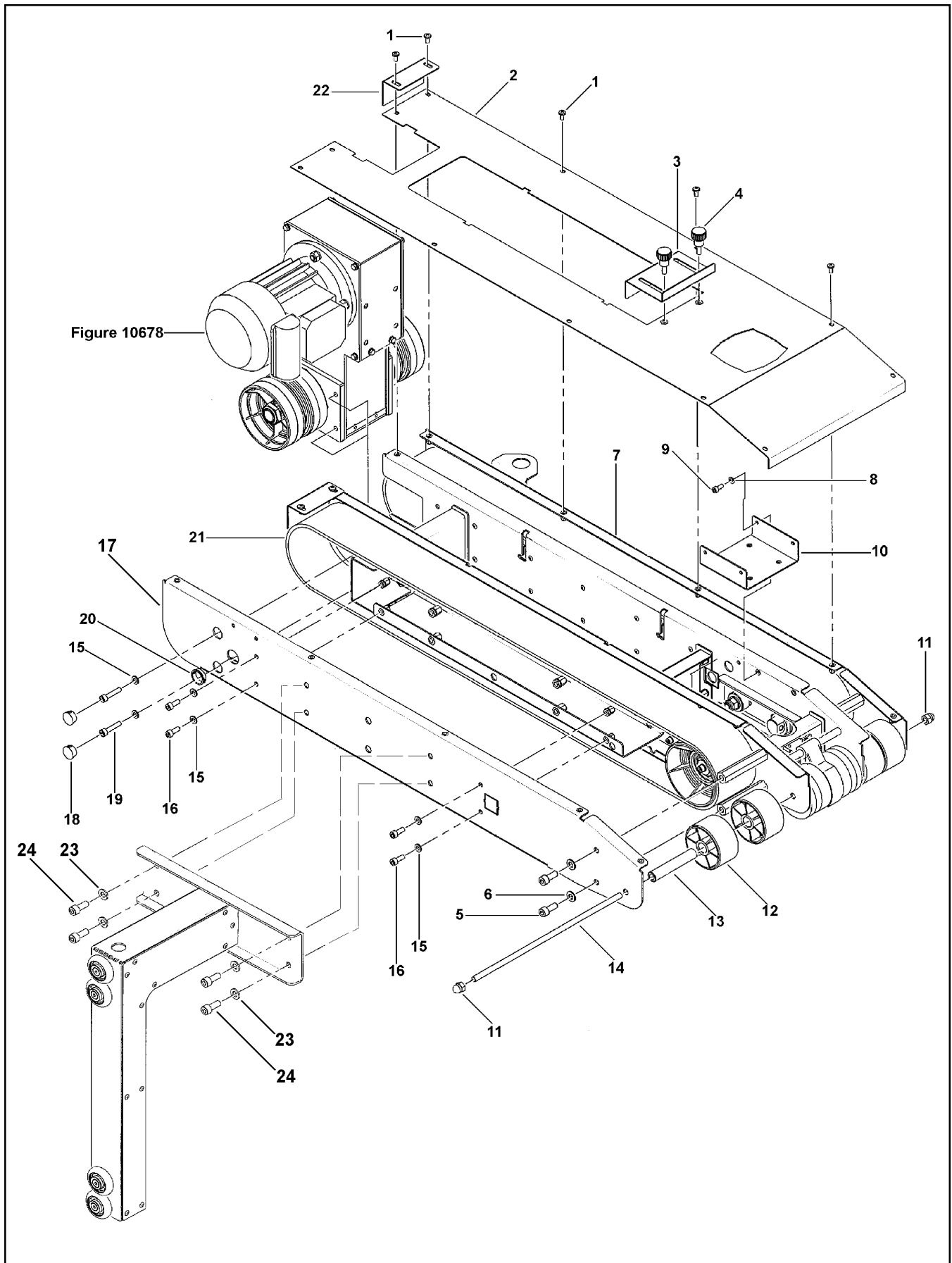


Figure 10732

Figure 10732

Ref. No.	3M Part No.	Description
10732-1	78-8094-6145-8	Screw, M5 x 12
10732-2	78-8137-0679-9	Cover, Drive, Top
10732-3	78-8137-0681-5	Plate, Lock
10732-4	78-8137-0629-4	Knob
10732-5	26-1003-7963-0	Screw, Soc. Hd. M8 x 16
10732-6	78-8017-9318-9	Washer, Plain, 8 mm
10732-7	78-8137-0674-0	Guard, Belt, R/H, with Insert
10732-8	78-8005-5741-1	Washer, Flat, M5
10732-9	26-1003-7949-9	Screw, Hex. Soc. Hd., M5 x 12
10732-10	78-8137-0675-7	Support, E-Stop
10732-11	78-8100-1132-6	Nut, Special, M8
10732-12	78-8076-4656-3	Roller
10732-13	78-8137-0678-1	Spacer, Roller
10732-14	78-8137-0677-3	Shaft, Roller
10732-15	26-1000-0010-3	Washer, Flat M6
10732-16	26-1003-7957-2	Screw, Hex. Soc. Hd., M6 x 16
10732-17	78-8137-0673-2	Guard, Belt , L/H with Insert
10732-18	78-8076-4744-7	Plug /17
10732-19	78-8010-7210-5	Screw, Hex. Soc.Hd., M6 x 20
10732-20	78-8137-0680-7	Cap, End
10732-21	78-8070-1531-4	Belt, Drive, with Hook
10732-22	78-8137-0676-5	Safety, Belt
10732-23	78-8017-9318-9	Washer, Plain, 8 mm
10732-24	26-1003-7964-8	Screw, Hex Soc. Hd. Dr., M8 x 20

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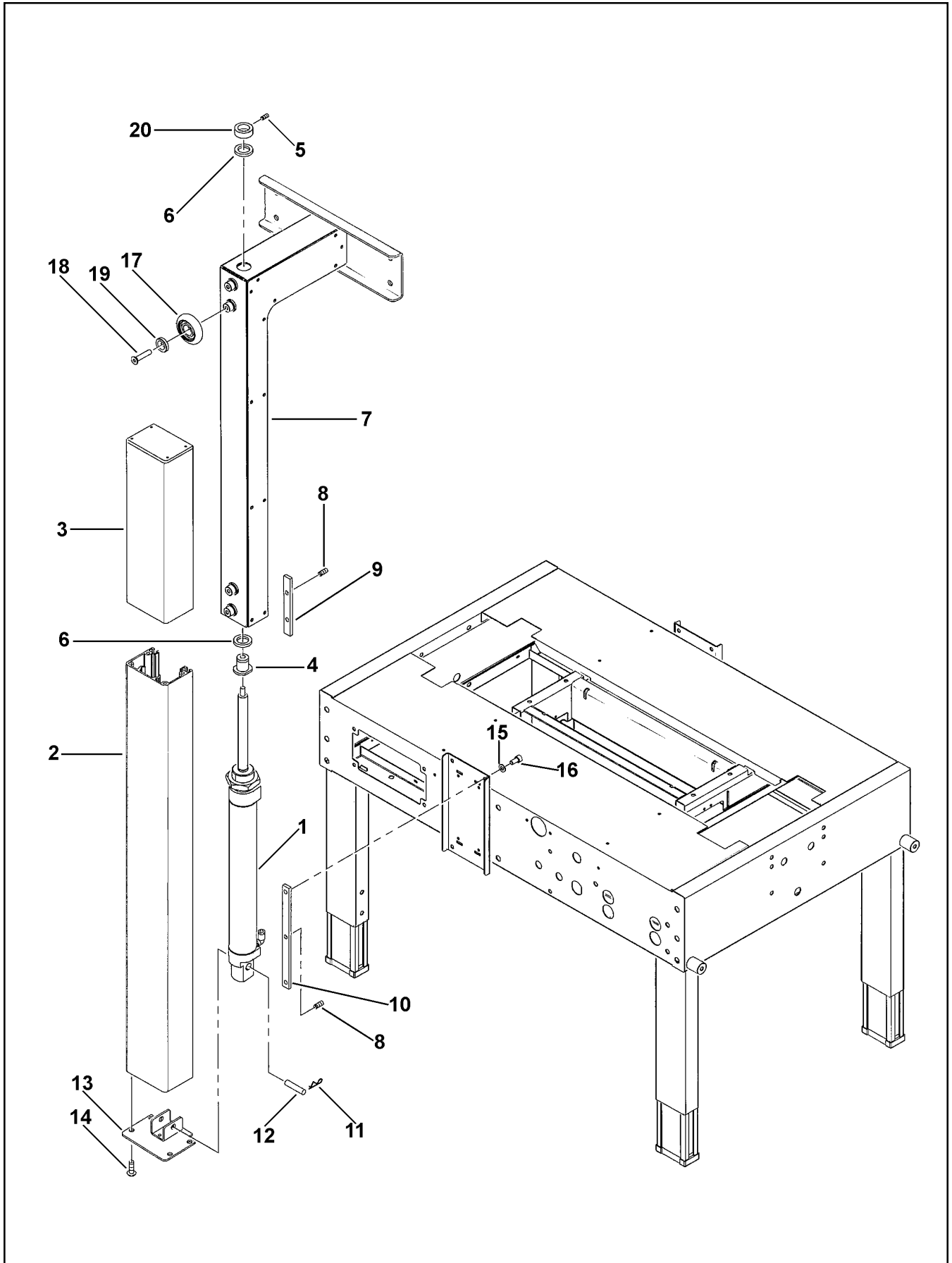


Figure 10733

Figure 10733

Ref. No.	3M Part No.	Description
10733-1	78-8137-0727-6	Cylinder Assembly
10733-2	78-8137-0730-0	Column, Outer
10733-3	78-8137-0731-8	Column
10733-4	78-8137-0694-8	Rod, Mounting
10733-5	78-8059-5617-0	Set Screw, M6 x 8
10733-6	78-8054-8823-2	Washer, Bumper
10733-7	78-8137-0732-6	Column, Inner
10733-8	78-8060-7889-1	Set Screw, M8 x 10
10733-9	78-8137-0733-4	Plate, Column
10733-10	78-8137-0734-2	Plate, Column
10733-11	78-8137-0735-9	Spring
10733-12	78-8137-0736-7	Pin, Air Cylinder
10733-13	78-8137-0737-5	Support, Air Cylinder
10733-14	78-8129-6124-7	Screw, Cup Hd., M8 x 16
10733-15	78-8017-9318-9	Washer, Plain, 8 mm
10733-16	78-8114-4818-8	Screw, Hex. Soc. Hd.
10733-17	78-8137-0621-1	Bearing, Special
10733-18	78-8137-0622-9	Screw, M6 x 30
10733-19	78-8076-5477-3	Washer, Special, 6.5 x 20 x 4
10733-20	78-8076-4552-4	Ring Nut, Rod

r70 Random Case Sealer

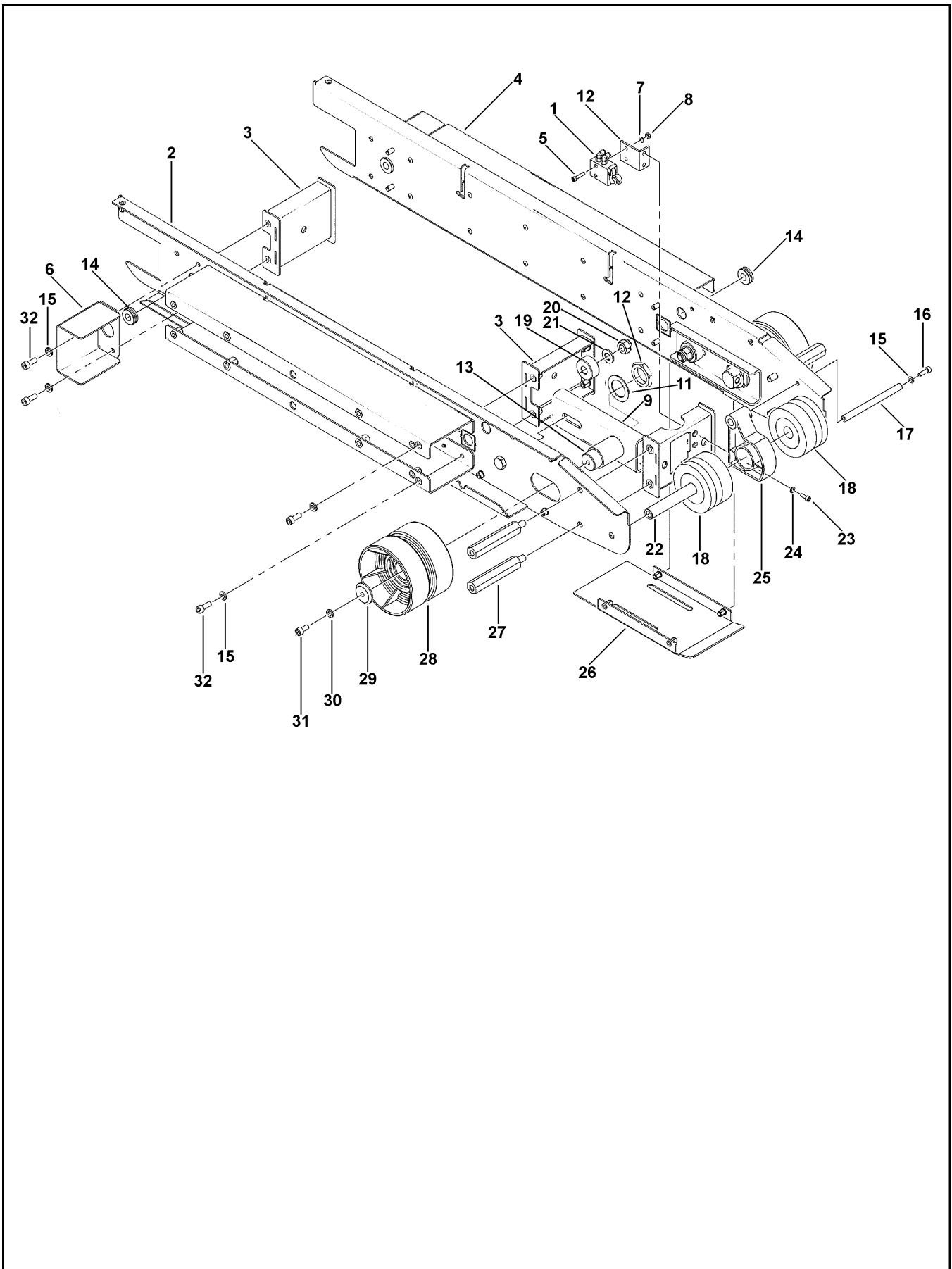


Figure 10734

Figure 10734

Ref. No.	3M Part No.	Description
10734-1	78-8137-0725-0	Head Valve Assembly
10734-2	78-8137-0682-3	Frame, L/H
10734-3	78-8137-0685-6	Spacer
10734-4	78-8137-0683-1	Frame, R/H
10734-5	26-1003-7946-5	Screw, Soc. Hd., M4 x 25
10734-6	78-8137-0687-2	Bracket
10734-7	78-8005-5740-3	Washer, Plain, 4 mm
10734-8	78-8010-7416-8	Nut, Hex., Steel, M4
10734-9	78-8137-0692-2	Belt, Tensioning
10734-10	78-8137-0694-8	Washer, 38 x 1, 5 x 25, 5
10734-11	78-8137-0695-5	Nut, Special, M25 x 1, 5
10734-12	78-8137-0738-3	Support, Valve
10734-13	78-8137-0693-0	Shaft, Pulley
10734-14	78-8052-6659-6	Grommet
10734-15	26-1000-0010-3	Washer, Flat M6
10734-16	78-8010-7209-7	Screw, Soc. Hd., M6 x 12
10734-17	78-8137-0739-1	Shaft
10734-18	78-8137-0740-9	Roller
10734-19	78-8070-1518-1	Spacer, Shaft
10734-20	26-1003-6918-5	Nut, Plastic Insert, Hex., M10
10734-21	26-1004-5510-9	Washer, Plain, M10
10734-22	78-8137-0690-6	Spacer, Shaft
10734-23	26-1003-7949-9	Screw, Hex Soc. Hd., M5 x 12
10734-24	78-8005-5741-1	Washer, Flat, M5
10734-25	78-8076-4657-1	Link, Actuator, Valve
10734-26	78-8137-0688-0	Cover, Lower
10734-27	78-8137-0689-8	Shaft
10734-28	78-8052-6710-7	Roller, Idler
10734-29	78-8060-8248-9	Washer, Special
10734-30	78-8010-7435-8	Washer, Lock, M6
10734-31	78-8010-7209-7	Screw, Soc. Hd., M6 x 12
10734-32	26-1003-7957-2	Screw, Hex. Soc. Hd., M6 x 16

r70 Random Case Sealer

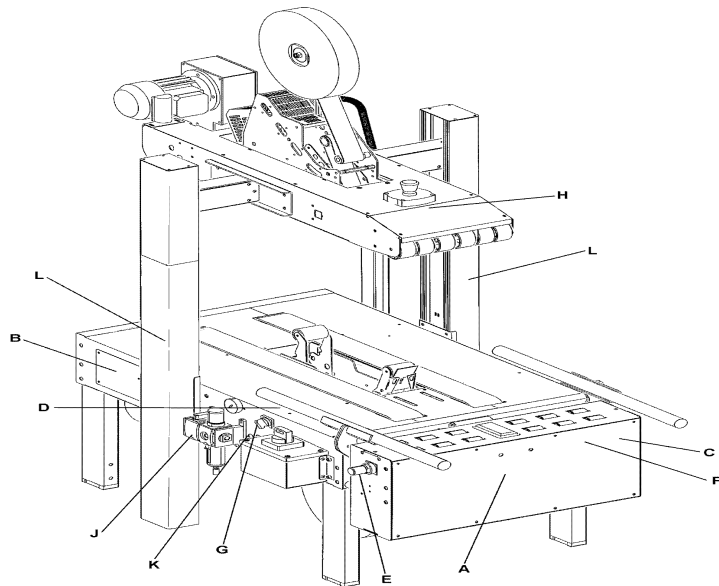
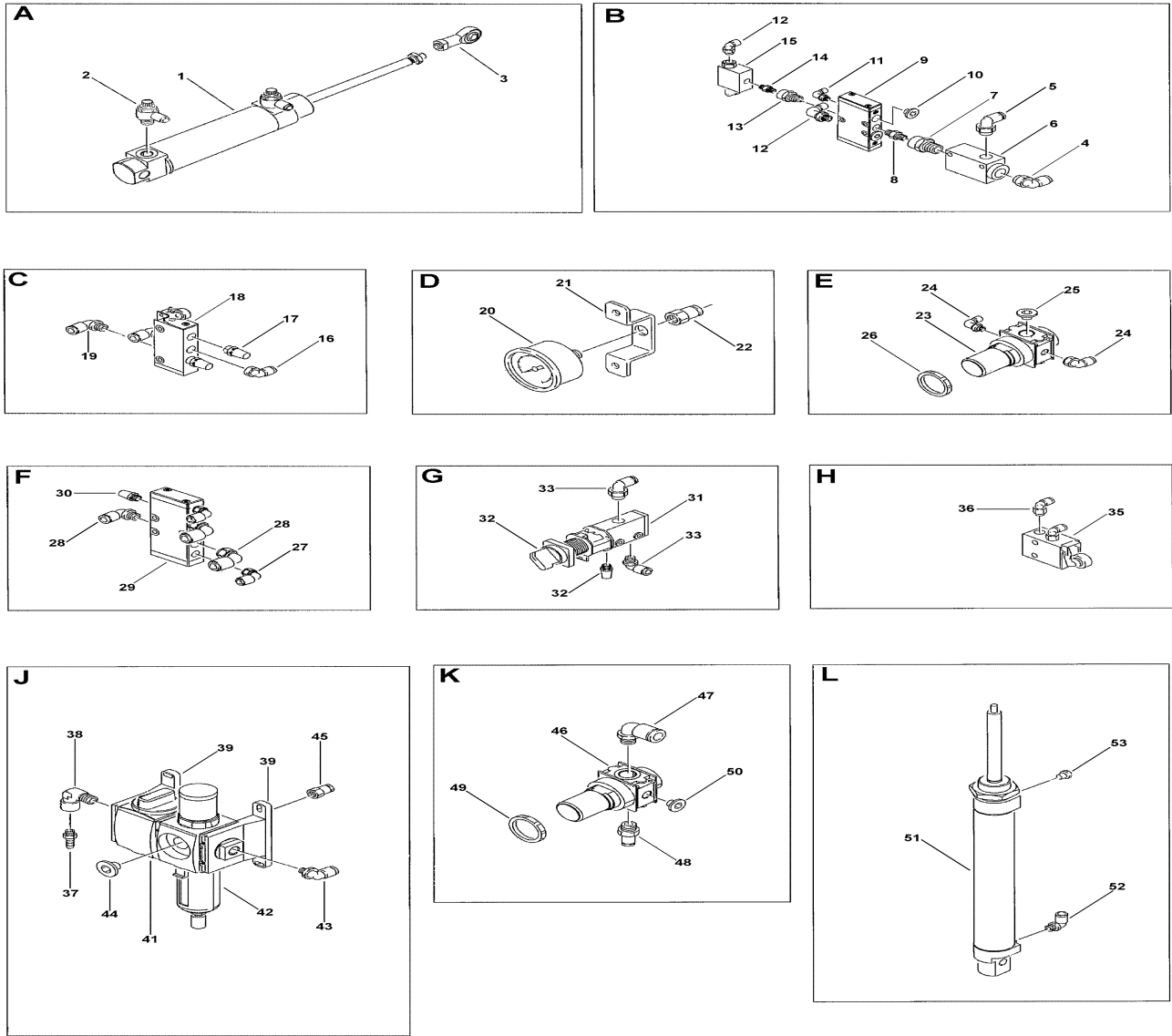


Figure 10739

Figure 10739

Ref. No.	3M Part No.	Description
10739-1	78-8137-0724-3	Gr. Cylinder Lever
10739-2	78-8091-0510-5	Regulator, Speed
10739-3	78-8137-0701-1	Mount, Cylinder Rod End
10739-4	78-8119-8628-6	Union, Elbow, 31990817
10739-5	78-8091-0315-9	Elbow, 3199.08.13
10739-6	78-8137-0705-2	Valve, G1/4
10739-7	78-8114-5012-2	Reduction, Conical
10739-8	78-8137-0775-5	Nipple, Conical, 1/8"-1/4"
10739-9	78-8137-0707-8	Valve, Mono, Bosch
10739-10	78-8060-7690-3	Cap
10739-11	78-8057-5732-1	Fitting, Elbow
10739-12	78-8091-0313-4	Elbow, 3199.08.10
10739-13	78-8076-4904-7	Extension, Conical, RA016 1/8"
10739-14	78-8055-0818-7	Nipple, Tapered, RA012-1/8"
10739-15	78-8137-0706-0	Valve, G 1/8
10739-16	78-8091-0313-4	Elbow, 3199.08.10
10739-17	26-1005-6890-1	Muffler
10739-18	78-8137-0723-5	Valve, 5/2 1/8 Roller
10739-19	26-1005-5909-0	Elbow
10739-20	78-8054-8838-0	Gauge, Air
10739-21	78-8076-4535-9	Bracket
10739-22	78-8076-4672-0	Union, Straight, Female
10739-23	78-8137-0721-9	Reductor, Compression, 0,2 6 BAR
10739-24	78-8091-0315-9	Elbow, 3199.08.13
10739-25	78-8060-7690-3	Cap
10739-26	78-8137-0716-9	Fixed Metal Ring
10739-27	78-8057-5732-1	Fitting, Elbow
10739-28	78-8091-0313-4	Elbow, 3199.08.10
10739-29	78-8137-0714-4	Valve, 5/2 Series TC08 G1/8
10739-30	26-1005-6890-1	Muffler
10739-31	78-8137-0718-5	Valve, 3/2-G1/8
10739-32	78-8137-0719-3	Selector, AT 2, Fixed Position
10739-33	78-8091-0313-4	Elbow, 3199.08.10
10739-34	26-1005-6890-1	Muffler
10739-35	78-8137-0726-8	Valve 3/2
10739-36	26-1005-5909-0	Elbow
10739-37	78-8119-8611-2	Hose Connector, RA030 3/8"
10739-38	78-8060-7900-6	Union
10739-39	78-8137-0709-4	Bracket, Square
10739-40	78-8137-0710-2	Valve Block G 1/4" R412006260
10739-41	78-8137-0711-0	Housing, AS-2 Air Filter
10739-42	78-8137-0712-8	Filter Regulator G 1/4" R412006201
10739-43	78-8091-0315-9	Elbow, 3199.08.13
10739-44	78-8119-8617-9	Cap, 1/4"
10739-45	78-8094-6075-7	Union, Straight
10739-46	78-8137-0715-1	Reductor, Compression, 01 3BAR
10739-47	78-8091-0315-9	Elbow, 3199.08.13
10739-48	78-8094-6075-7	Union, Straight
10739-49	78-8137-0716-9	Fixed Metal Ring
10739-50	78-8060-7690-3	Cap
10739-51	78-8137-0728-4	Cylinder, Series CPC
10739-52	78-8091-0313-4	Elbow, 3199.08.10
10739-53	78-8094-6457-7	Cap, 1/8"

r70 Random Case Sealer

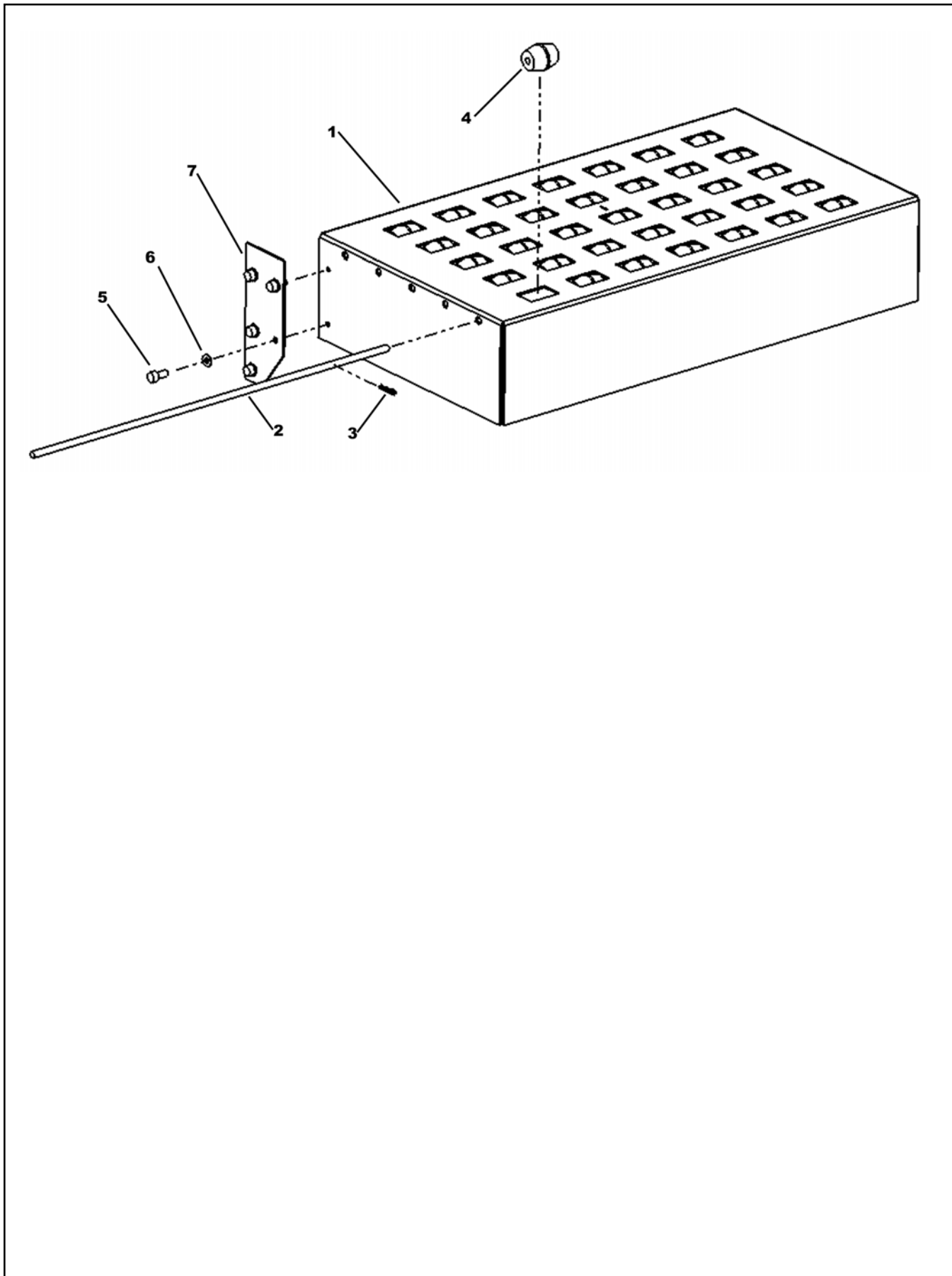


Figure 10758

Figure 10758

Ref. No.	3M Part No.	Description
10758-1	78-8137-1311-8	Frame, Infeed/Exit Conveyor
10758-2	78-8137-1309-4	Shaft, Conveyor Roller
10758-3	78-8137-0375-9	Pin, Cotter
10758-4	78-8060-7692-7	Roller, Tapered
10758-5	26-1003-7964-8	Screw, Hex. Soc. Hd., M8 x 20
10758-6	78-8017-9318-9	Washer, M8
10758-7	78-8137-1310-0	Plate, Conveyor Attachment

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Instructions and Parts List

AccuGlide™ 2+

STD 2 Inch

Upper and Lower Taping Heads

Type 10500

Serial No. _____

For reference, record taping head(s) serial number(s) here.



3M Industrial Adhesives and Tapes

3M Center, Building 220-5E-06
St. Paul, MN 55144-1000



Important Safety Information

BEFORE INSTALLING OR
OPERATING THIS
EQUIPMENT

Read, understand, and follow
all safety and operating
instructions.

Spare Parts

It is recommended you
immediately order the spare
parts listed in the "Spare
Parts/Service Information"
section. These parts are
expected to wear through
normal use, and should be
kept on hand to minimize
production delays.

AccuGlide™ is a Trademark of
3M, St. Paul, MN 55144-1000

Litho in U.S.A

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To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch® equipment you ordered. It has been set up and tested in the factory with Scotch® tapes. If technical assistance or replacement parts are needed, call or fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

Technical Assistance:

Call the 3M-Matic™ Helpline at 1-800-328-1390. Please provide the customer support coordinator with the machine number, machine type, model number, and serial number. If you have a technical question that does not require an immediate response, you may fax it to 651-736-7282.

Replacement Parts and Additional Manuals

Order parts by part number, part description, and quantity required. When ordering parts or additional manuals, include the machine name, model number, and type. A parts order form is provided at the back of this manual.

3M Tape Dispenser Parts

241 Venture Drive

Amery, WI 54001-1325

1-800-344-9883

Fax: 715-268-8153

Minimum billing on parts orders will be \$25.00. Replacement part prices available on request.

\$10.00 restocking charge per invoice on returned parts.

Note : Outside the U.S., contact the local 3M subsidiary for parts ordering information.



3M Industrial Adhesives and Tapes

3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

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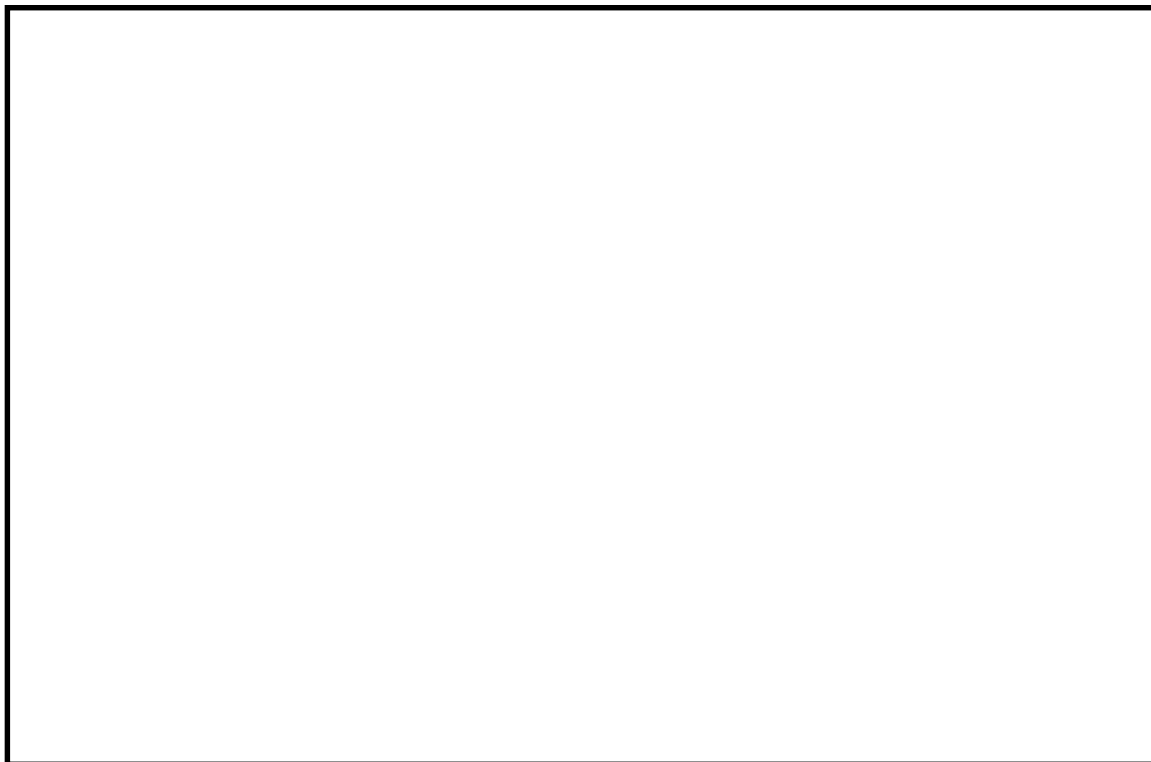
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To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch® equipment you ordered. It has been set up and tested in the factory with Scotch® tapes. If any problems occur when operating this equipment and you desire a service call or phone consultation, call, write, or fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

**SERVICE, REPLACEMENT PARTS, AND ADDITIONAL MANUALS
AVAILABLE DIRECT FROM:**



Order parts by part number, part description, and quantity required. Also, when ordering parts or additional manuals, include machine name, model number, and type.



3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

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Instruction Manual

AccuGlide™ 2+ STD 2 Inch
Upper and Lower Taping Heads
Type 10500

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Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE:

3M sells its **AccuGlide™ 2+ STD 2 Inch Upper and Lower Taping Heads, Type 10500** with the following warranty:

1. The Taping Head blade, springs and rollers will be free from defects in material and manufacture for ninety (90) days after delivery.
2. All other Taping Head parts will be free from defects in material and manufacture for three (3) years after delivery.

If any part is defective within this warranty period, your exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part. 3M must receive actual notice of any alleged defect within a reasonable time after it is discovered, but in no event shall 3M have any obligation under this warranty unless it receives such notice within five (5) business days after the expiration of the warranty period. All notices required hereunder shall be given to 3M solely through the 3M-Matic™ Helpline (800-328-1390). To be entitled to repair or replacement as provided under this warranty, the part must be returned as directed by 3M to its factory or other authorized service station designated by 3M. If 3M is unable to repair or replace the part within a reasonable time after receipt thereof, 3M, at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to remove any part or equipment or to install the repaired or replacement part or equipment. 3M shall have no obligation to repair or replace those parts failing due to normal wear, inadequate or improper maintenance, inadequate cleaning, non-lubrication, improper operating environment, improper utilities, operator error or misuse, alteration or modification, mishandling, lack of reasonable care, or due to any accidental cause.

Limitation of Liability: Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from this 3M equipment, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including breach of warranty, breach of contract, negligence, or strict liability.

Note: The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized representatives of 3M and seller.

Taping Head Contents

AccuGlide™ 2+ STD 2 Inch Upper and Lower Taping Heads consist of:

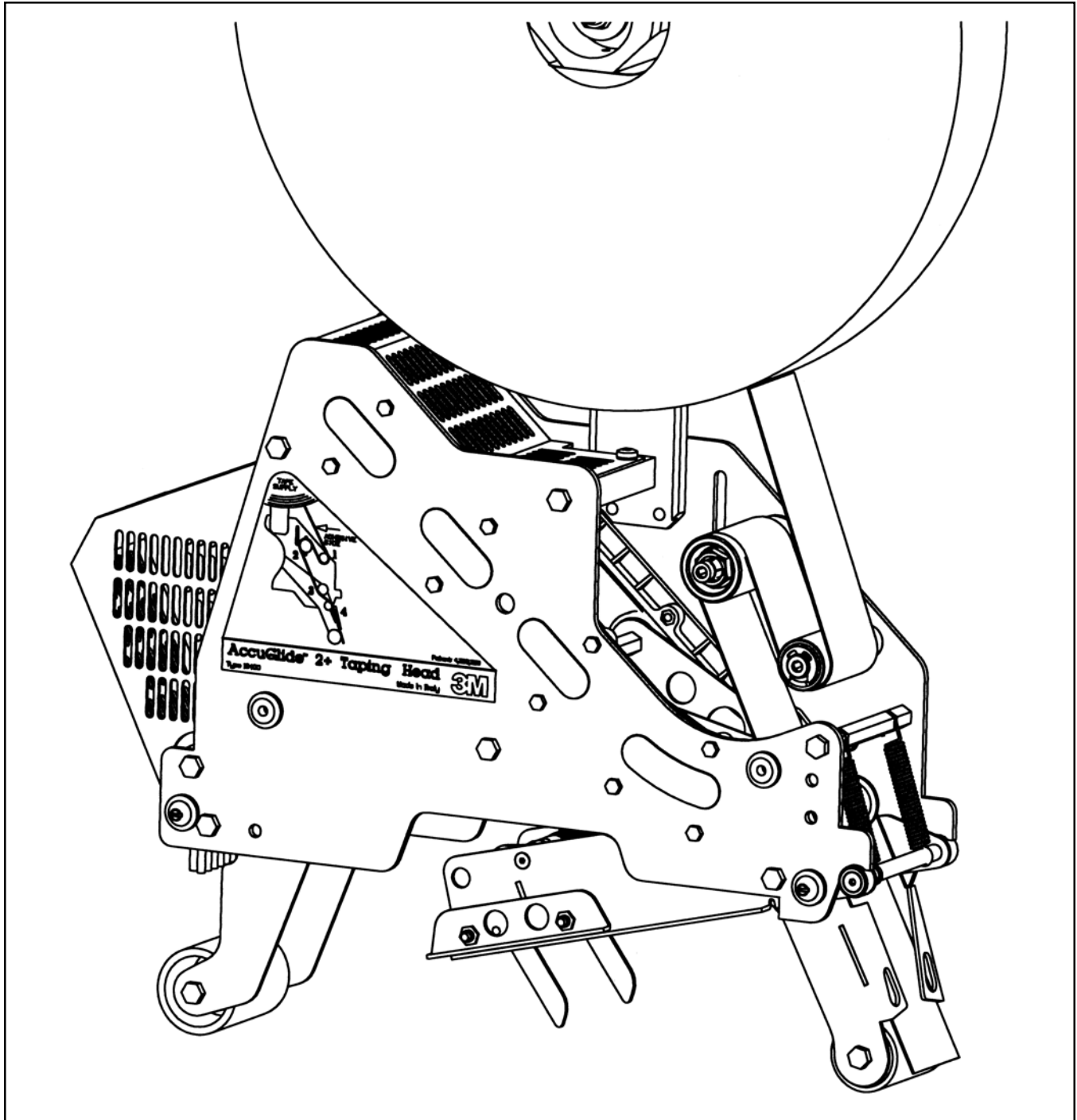
Qty.	Part Name
1	Taping Head Assembly
1	Tape Drum and Bracket Assembly
1	Hardware and Spare Parts Kit
1	Threading Tool

Intended Use

The **AccuGlide™ 2+ STD 2 Inch Upper and Lower Taping Heads** applies a "C" clip of Scotch® pressure-sensitive film box sealing tape to the top and bottom center seam of regular slotted containers.

These taping heads are incorporated into most standard **3M-Matic™** case sealers. The compact size and simplicity of the taping head also makes it

suitable for mounting in box conveying systems other than **3M-Matic™** case sealers. This includes replacing other types of taping, gluing, or stapling heads in existing case sealing machines. The **AccuGlide™ 2+ STD Taping Heads** have been designed and tested for use with Scotch® pressure-sensitive film box sealing tape.



AccuGlide™ 2+ STD 2 Inch Upper Taping Head, Type 10500

Important Safeguards



This safety alert symbol identifies important safety messages in this manual. **READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.**

Explanation of Signal Word Consequences



WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death, serious injury, and property damage.



CAUTION: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and property damage.



WARNING

- **To reduce the risk associated with mechanical hazards:**
 - Read, understand and follow all safety and operating instructions before operating or servicing the case sealer.
 - Allow only properly trained and qualified personnel to operate and service this equipment.
- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn off air and electrical supplies on associated equipment before performing any adjustments, maintenance, or servicing the taping heads.
 - Never attempt to work on the taping head or load tape while the box drive system is running.
- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.



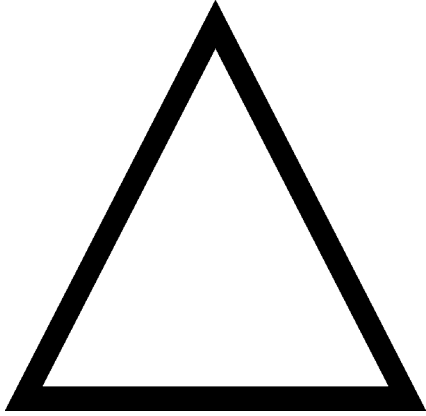
CAUTION

- **To reduce the risk associated with muscle strain:**
 - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.
- **To reduce the risk associated with impact hazards:**
 - Place the taping head on a smooth level surface when maintaining or servicing this equipment.

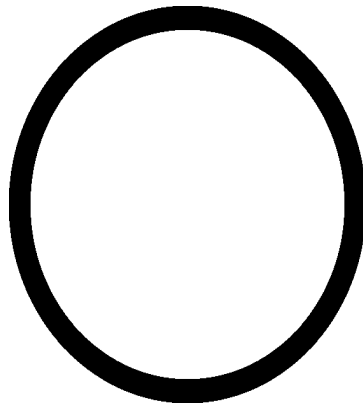
Important Safeguards

Safety Label Shapes

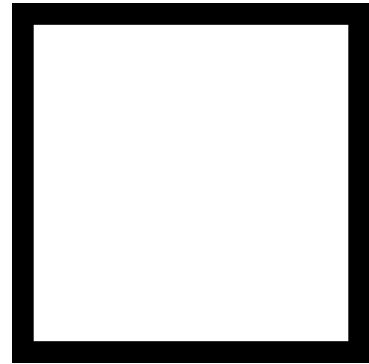
Three types of safety label shapes are used on this equipment.



Danger or Moving Parts



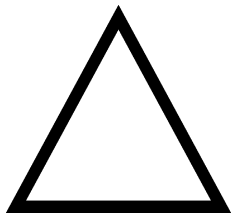
Prohibitions



Information

Safety Labels In Use

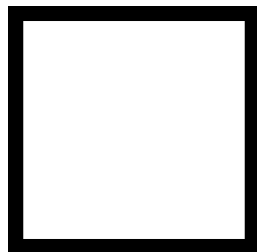
The following labels are used on this equipment. Refer to Figure 1-1 for label placement.



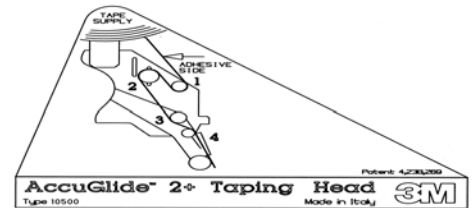
Warns of a sharp knife blade in the taping head.



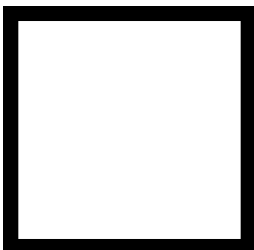
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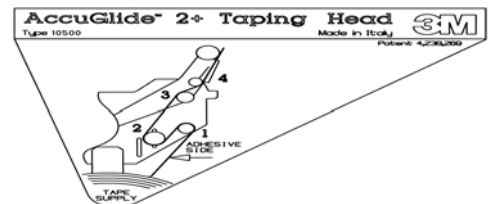
Tape threading path for upper taping head.



78-8133-9605-4



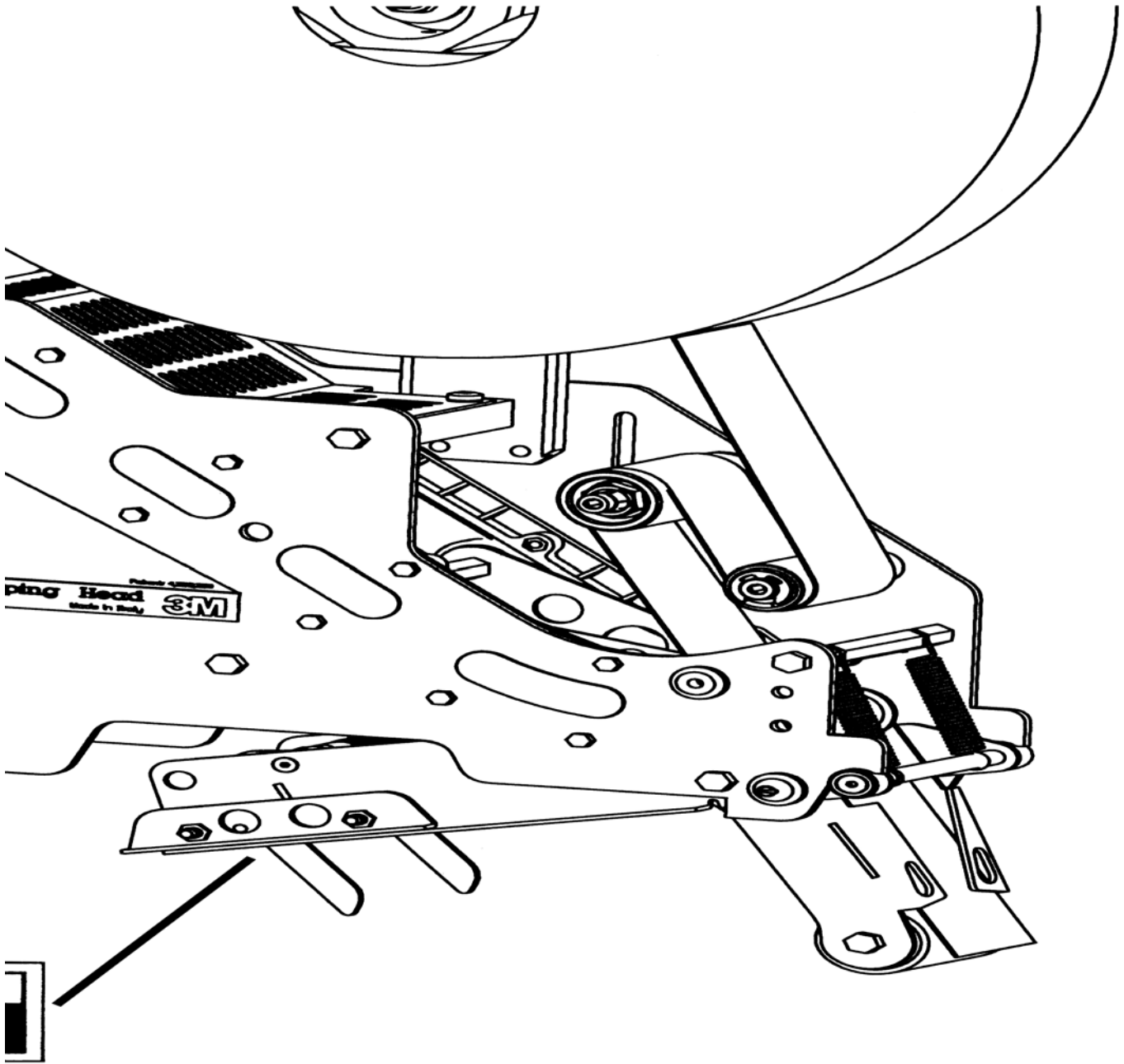
Tape threading path for lower taping head.



78-8133-9606-2

Important Safeguards (Continued)

Important: If any of the following safety labels are damaged or destroyed, they must be replaced to ensure operator safety. See "Replacement Parts Illustrations and Parts Lists" for label part numbers.



78-8133-9606-2
Tape Threading Label
(Not shown)

Figure 1-1—Replacement Labels and 3M Part Numbers

Specifications

1. **Tape:**

For use with Scotch® pressure-sensitive film box sealing tapes.

2. **Tape Width:**

36 mm or 1 1/2 inches minimum to 48 mm [2 inches] maximum.

3. **Tape Roll Diameter:**

Up to 405 mm [16 inches] maximum on a 76.2 mm [3 inch] diameter core.
(Accommodates all system roll lengths of Scotch® film tapes.)

4. **Tape Application Leg Length - Standard:**

70 mm ± 6 mm [2 3/4 inches ± 1/4 inch]

Tape Application Leg Length - Optional:

50 mm ± 6 mm [2 inches ± 1/4 inch] (See "Adjustments—Tape Leg Length.")

5. **Box Size Capacities:**

For use with center seam regular slotted containers.

	Minimum		Maximum
Length:	150 mm [6 inches]		Unlimited
Height:	120 mm [4 3/4 inches] (most 3M-Matic™ Case Sealers)	}	Limited by Case Sealer
	90 mm [3 1/2 inches] (with optional 2 inch leg length)		
Width:	115 mm [4 1/2 inches]		

When upper and lower taping heads are used on 3M-Matic™ case sealers, refer to the respective instruction manual specifications for box weight and size capacities.

6. **Operating Rate:**

Conveyor speeds up to 0.40 m/s [80 FPM] maximum.

7. **Operating Conditions:**

Use in dry, relatively clean environments at 5 °C–40 °C [40 °F–105 °F] with clean, dry boxes.

Important: Taping heads should not be washed or subjected to conditions causing moisture condensation on components.

8. **Taping Head Dimensions:**

Length:	457 mm [18 inches]
Height:	560 mm [22 inches] (with tape drum)
Width:	105 mm [4 1/8 inches] (without mounting spacers)
Weight:	Packaged: 7.7 kg [17 lbs.] Unpackaged: 6.7 kg [15 lbs.]

Specifications (Continued)

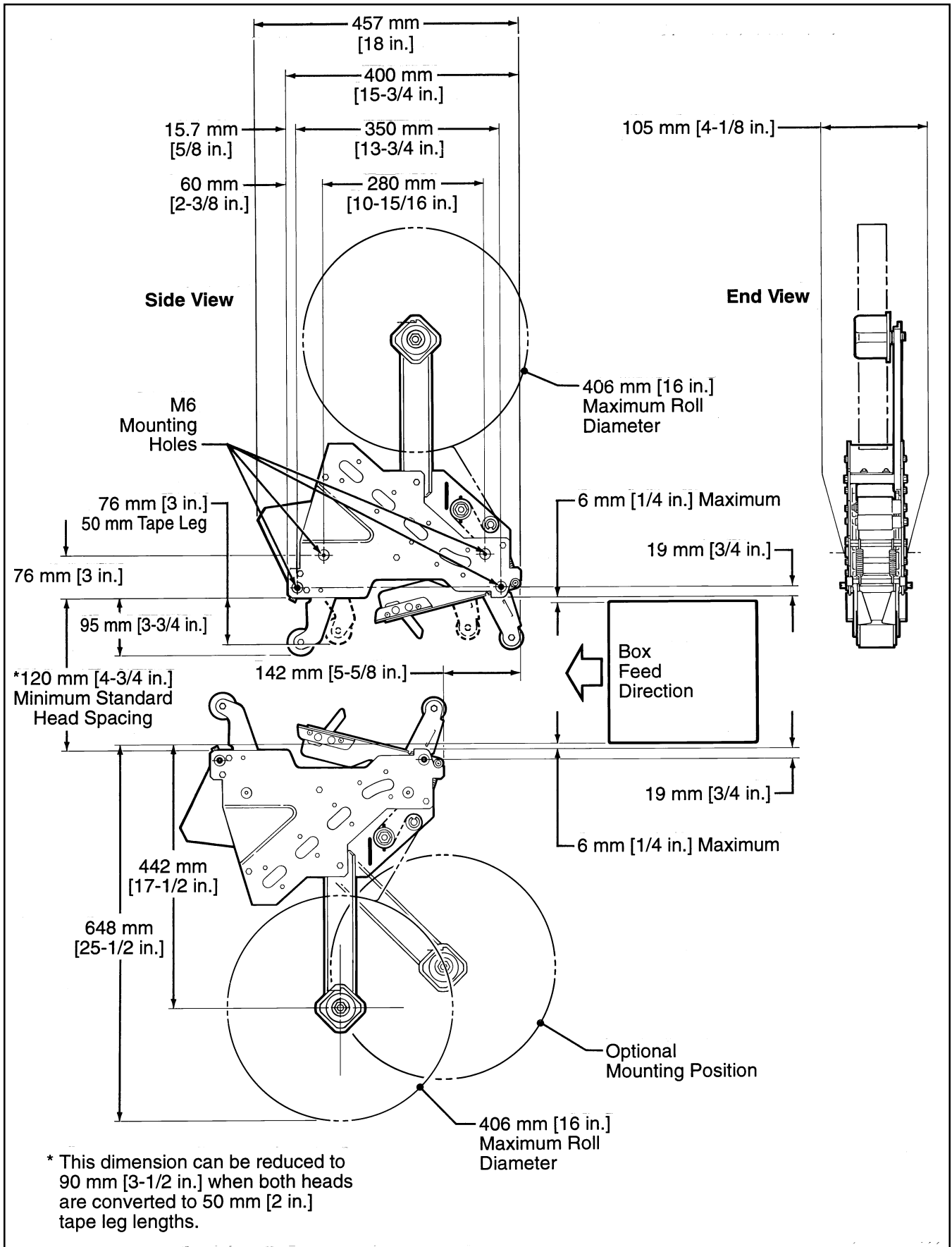


Figure 2-1—Dimensional Drawing

Installation

WARNING

- **To reduce the risk associated with sharp blade hazards:**

- Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

Receiving And Handling

After the taping head assembly has been unpackaged, examine the unit for damage that might have occurred during transit. **If damage is evident, file a damage claim immediately** with the transportation company and also notify your 3M Representative.

Installation Guidelines

The taping head assembly can be used in converting existing or in custom made machinery. It can be mounted for top taping or bottom taping. Refer to "Box Size Capacities," as well as Figure 2-1 in the Specifications section, for the following points in making such installations:

CAUTION

- **To reduce the risk associated with muscle strain:**

- Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

Important: Always conduct a hazard review to determine appropriate guarding requirements when the installation is in an application other than 3M-Matic™ equipment.

1. The box conveying system must positively propel the box in a continuous motion, not exceeding 0.40 m/s [80 feet per minute], past the taping head assembly since the box motion actuates the taping mechanism.
2. If a pusher or cleated conveyor is being used, steps should be taken in the conveyor design to prevent the pusher from contacting the applying or buffing roller arms resulting in damage to the taping head.

3. Figure 2-1 illustrates the typical mounting relationship for opposing taping head assemblies to allow taping of box heights down to 90 mm [3 1/2 inches]. To tape box heights down to 70 mm [2 3/4 inches], the taping heads must be completely staggered so that only one tape seal is applied at one time.

The AccuGlide™ 2+ STD Upper Taping Head is supplied with a buffing arm guard. Adjustments to this guard may be required to install the taping head into some older design 3M-Matic™ case sealers.

4. Mounting studs are provided with the taping head, but special installations may require an alternate method of mounting.
5. Box hold-down or guide skis should be provided and the taping head mounted so that the side plates are 6 mm [1/4 inch] maximum away from the ski surface on which the box rides.

Tape Leg Length

Taping heads are factory set to apply standard 70 mm [2 3/4 inch] tape legs. The heads can be converted to apply 50 mm [2 inch] tape legs if desired but both upper and lower heads must be set to apply the same tape leg length. Refer to "Adjustments—Changing Tape Leg Length From 70 to 50 mm [2 3/4 to 2 inches]" for more information

The conveyor speed at which the product moves through the taping heads affects the leading and trailing tape leg length. Refer to "Adjustments—Leading Tape Leg Length Adjustment" for more information.

Tape Width Adjustment

Taping heads are factory set to apply 48 mm [2 inch] wide tape. If it is necessary to align the tape or to apply narrower tapes, refer to "Adjustments—Tape Web Alignment".

Operation

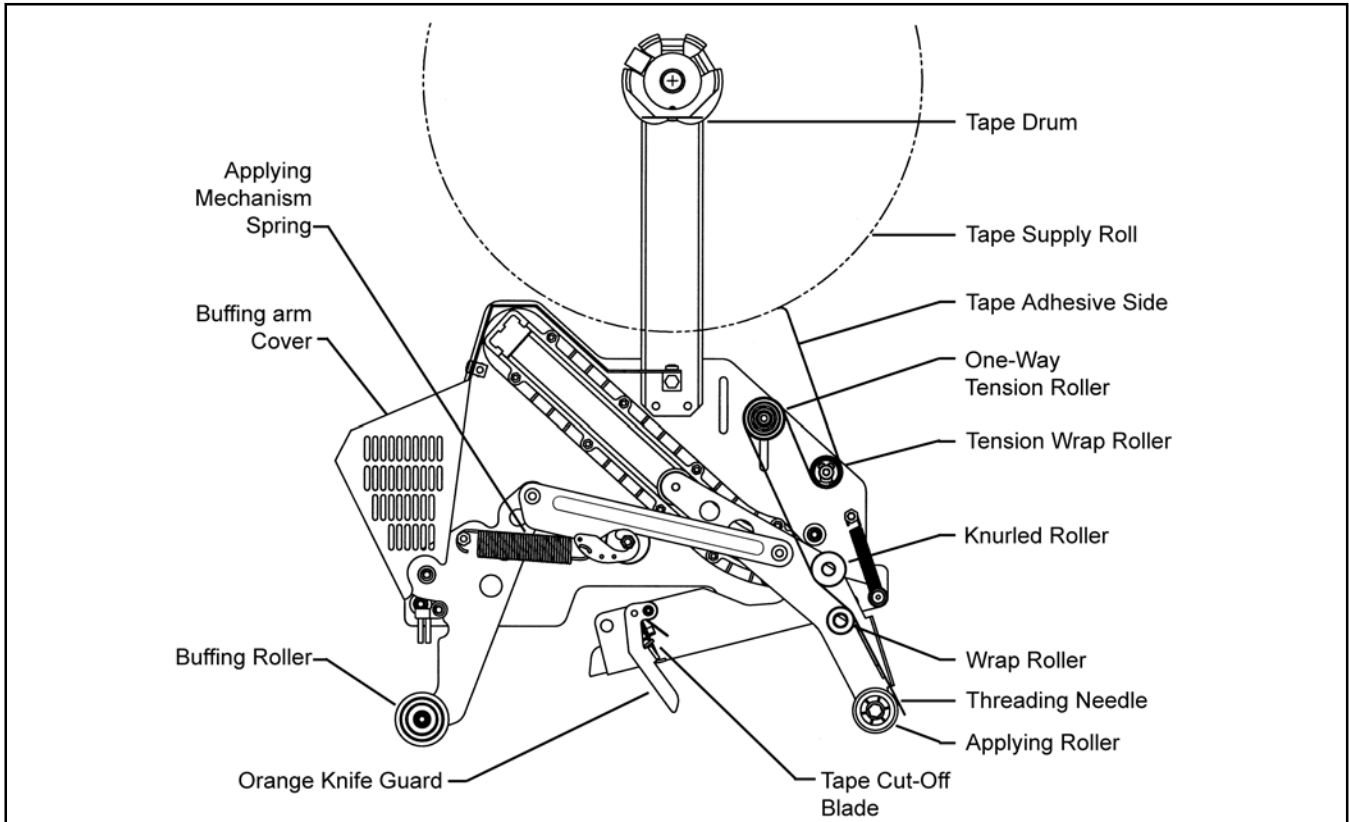


Figure 3-1—Taping Head Components and Threading Diagram, Upper Head (Left Side View)

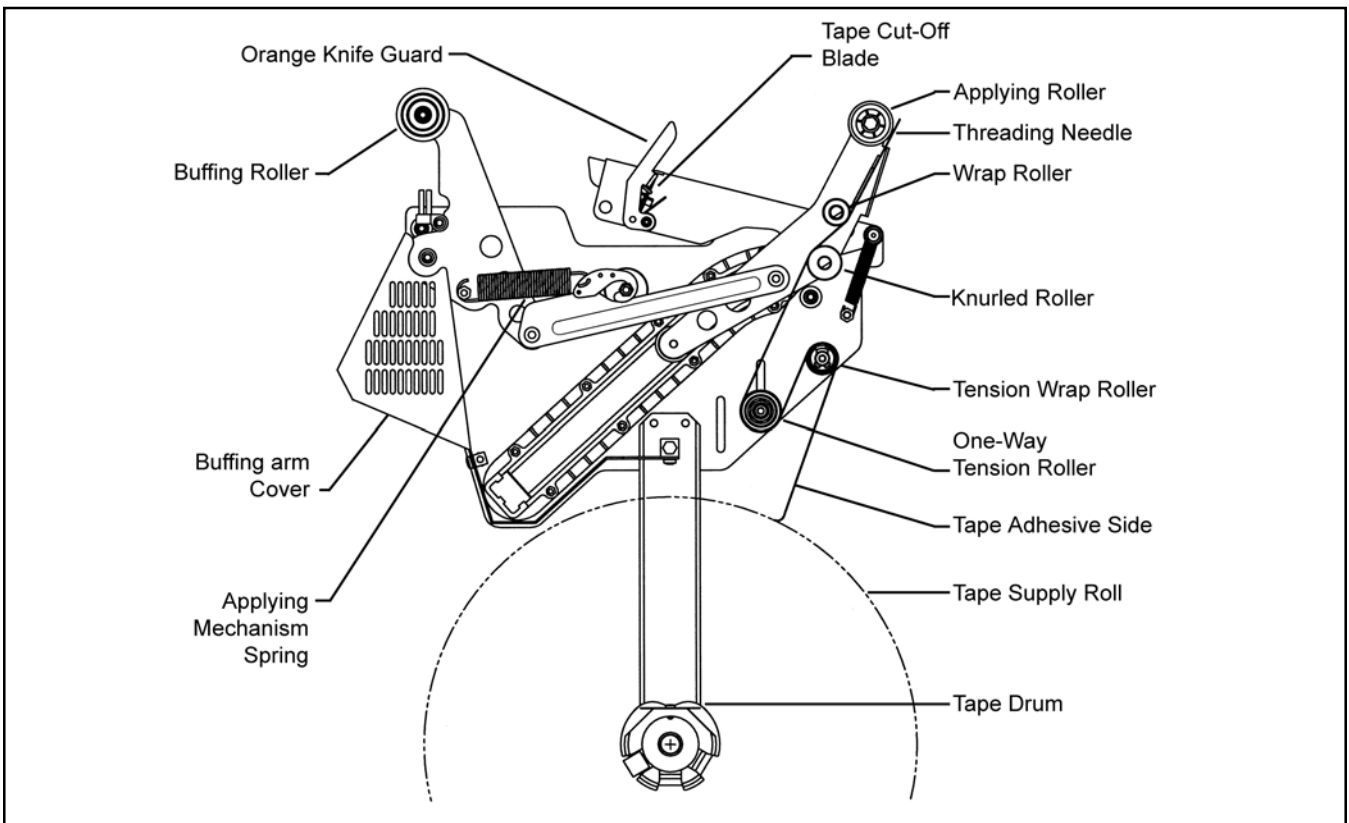


Figure 3-2—Taping Head Components and Threading Diagram, Lower Head (Left Side View)

Operation (Continued)

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads.
 - Never attempt to work on the taping heads or load tape when the box drive system is running.
- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

It is recommended that the detailed instructions and sketches in this manual be referred to the first few times the taping head is loaded and threaded until the operator becomes thoroughly familiar with the tape loading operation.

Note: Remove tape roll before removing taping head from machine to minimize weight.

CAUTION

- **To reduce the risk associated with muscle strain:**
 - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.
- **To reduce the risk associated with impact hazards:**
 - Place the taping head on a smooth level surface when maintaining or servicing this equipment.

Tape Loading—Upper Taping Head

1. Place the upper taping head in a convenient working position.
2. Use Figures 3-3 to 3-5 and tape threading label. Position the tape supply roll so the adhesive side of tape is facing the front of the taping head as it is pulled from the supply roll.
3. Attach the threading needle to the end of the roll. Guide the threading needle around the wrap roller (Position 1) then back around the one-way tension roller (Position 2).
4. Continue pulling the threading needle down and guide it between the two rollers on the apply arm (Position 3).

5. Pull the threading needle down until the tape travels between the apply plate and the ears of the applying arm (Position 4) until it extends past the applying roller. When properly threaded the adhesive side of the tape should be facing the knurled rollers at position 2 and also position 3.
6. Cut away any excess tape.

Important: Do not cut against the applying roller; roller damage could occur.

Tape Loading—Lower Taping Head

1. Remove the lower taping head from the conveyor bed or associated equipment and place it a convenient working position.
2. The lower taping head is loaded and threaded in the same manner as the upper head. Follow the upper taping head tape loading and threading procedure.

Insert threading needle through rollers in direction indicated by arrows as shown in Figure 3-3.

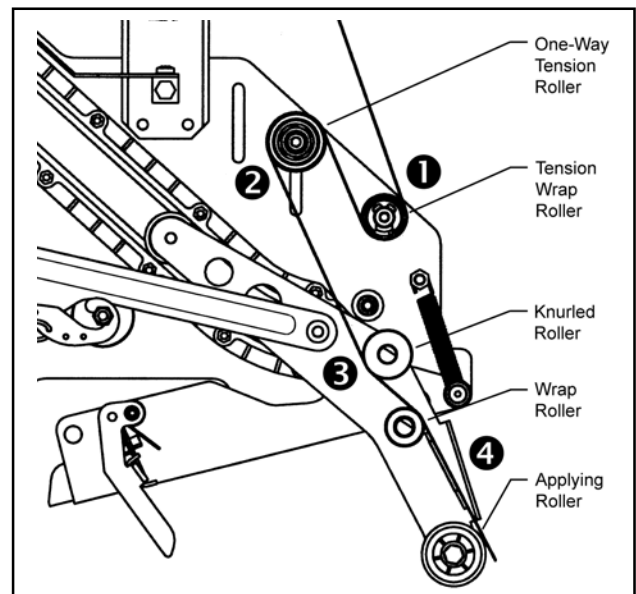


Figure 3-3—Tape Loading and Threading

Operation (Continued)

3. Place tape roll on tape drum to dispense tape with adhesive side forward. Seat tape roll fully against back flange of drum. Attach tape lead end to threading needle as shown in Figure 3-4.

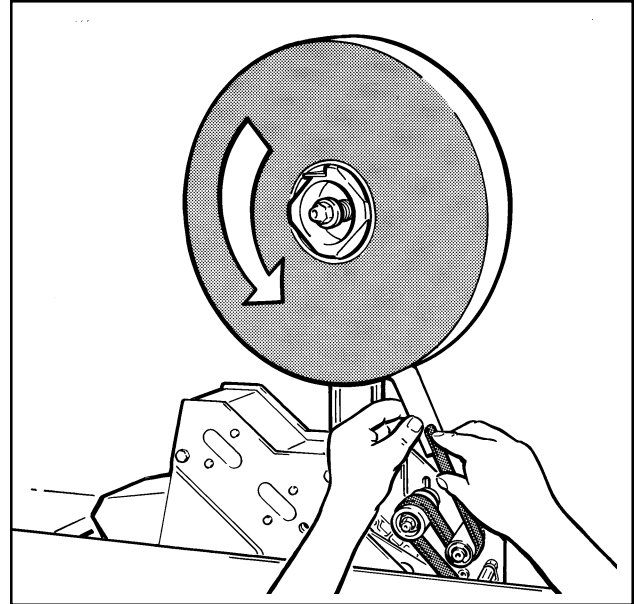


Figure 3-4—Tape Loading and Threading

WARNING

- **To reduce the risk associated with sharp blade hazards:**

- Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

4. Manually turn tape roll to create slack tape while pulling threading needle through tape applying mechanism until needle is through and the tape aligns with the applying roller.
5. Excess tape may be cut with a scissors at the applying roller as shown in Figure 3-5.

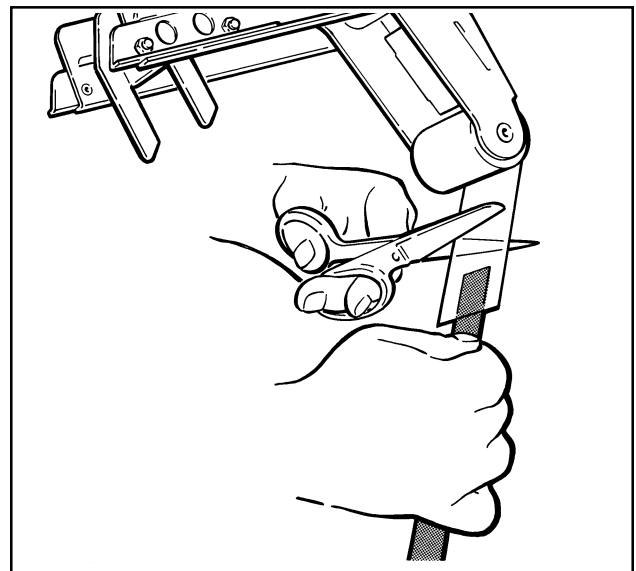


Figure 3-5—Cut Excess Tape

Maintenance

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the taping heads.
 - Never attempt to work on the taping head or load tape while the box drive system is running.
- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

The AccuGlide™ STD 2+ 2 Inch Taping Head has been designed for long, trouble-free service. The taping head performs best when it receives routine maintenance and cleaning. Taping head components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the head or to the product.

Blade Replacement, Upper and Lower Taping Heads

WARNING

- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blade edge. The knives are extremely sharp.

1. Loosen, but do not remove, the blade screws (**A**) as shown in Figure 4-1. Remove and discard old blade.
2. Mount the new blade (**B**) with the beveled side away from the blade holder.

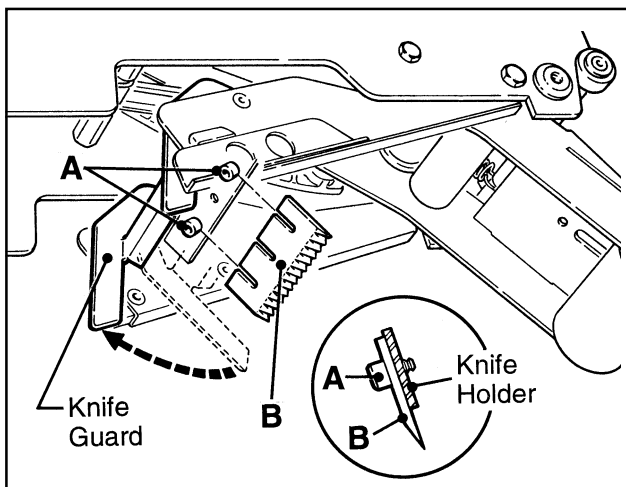


Figure 4-1—Blade Replacement

3. Slide the blade slots fully against the screws to position the blade at the correct angle. Tighten the blade screws to secure the blade.
4. Check the blade position to ensure proper clearance between blade and guard by slowly pivoting the blade guard back.

Blade Guard

The blade guard covers the blade whenever a box is not being taped. Periodically check to be sure the blade guard is functioning properly and returning to cover the blade. Replace any defective parts.

Blade Oiler Pad

WARNING

- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blade edge. The knives are extremely sharp.

The taping heads are equipped with a felt oiler pad that has been pre-lubricated at the factory to provide a film of oil on the cutting edge of the blade to reduce adhesive buildup. Apply SAE #30 non-detergent oil as needed. Saturate felt oiler pad.

Should tape adhesive buildup occur on blade, carefully wipe clean with an oily cloth.

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the taping heads.
 - Never attempt to work on the taping head or load tape while the box drive system is running.
- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

Cleaning

Regular slotted containers produce a great deal of dust and paper chips when conveyed through taping heads. If this dust is allowed to build up on the heads, it can cause wear on the moving parts. Excessive dirt buildup should be wiped off with a damp cloth. Cleaning should be done once per month, depending on the number and type of boxes used. If the boxes used are dirty, or if the operating environment is dusty, more frequent cleaning may be necessary.

Note: *Never attempt to remove dirt from taping heads by blowing it out with compressed air. This can cause the dirt to be blown inside the components onto sliding surfaces. Dirt in these areas can cause serious equipment damage. Never wash or subject taping heads to conditions causing moisture condensation on components. Serious equipment damage could result.*

Applying/Buffering Roller Replacement

Replacing roller requires removal of shaft and mounting screws. With no area on the shaft to grip, the shaft often turns when attempting to remove the second screw.

To ease removal of second screw, a 4 mm hex socket has been provided at the bottom of the threads in both ends of the shaft. Insert a 4 mm hex wrench into this socket after removing one screw to hold the shaft for removal of the second screw as shown in Figure 4-3.

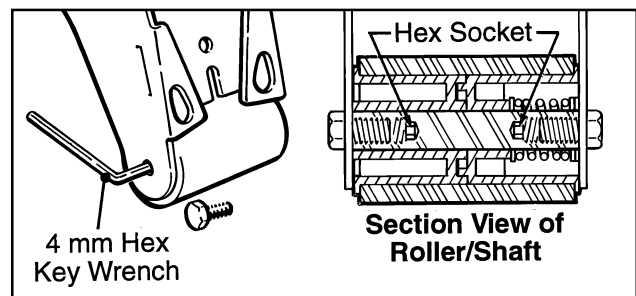


Figure 4-3—Section View of Roller Shaft

Adjustments

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads.
 - Never attempt to work on the taping head or load tape while the box drive system is running.

Tape Latch Alignment

The Latching tape drum assembly is pre-set to accommodate 48 mm [2 inch] wide tape. The tape drum assembly is adjustable to provide alignment of narrower tapes as shown in Figure 5-1.

To adjust the latch to a new tape core width, do the following:

1. Remove screw from the latch.
2. Move to the latch to the position that corresponds to the tape core width.
3. Replace screw in the new latch location.

To adjust or center the tape width on the centerline of the taping head and the box center seam as shown in Figure 5-2, do the following:

1. Loosen the locking hex nut behind tape drum bracket on tape drum shaft. Use an adjustable wrench or 25 mm open-end wrench.
2. Using a 5 mm hex wrench, turn tape drum shaft in or out to center the tape web as shown in Figure 5-2.
3. Tighten locking hex nut to secure the adjustment.

Tape Drum Friction Brake

The tape drum friction brake on each taping head is pre-set for normal operation to prevent tape roll over travel. Should tension adjustment be required, turn the self-locking nut on the shaft to vary compression of the spring. Turn the nut clockwise to increase the braking force, and counterclockwise to decrease the braking force as shown in Figure 5-3. Adjust brake to minimum tension to prevent excessive tape roll over travel.

Note: Excessive braking force will cause poor tape application and may lead to tape tabbing on the trailing tape leg.

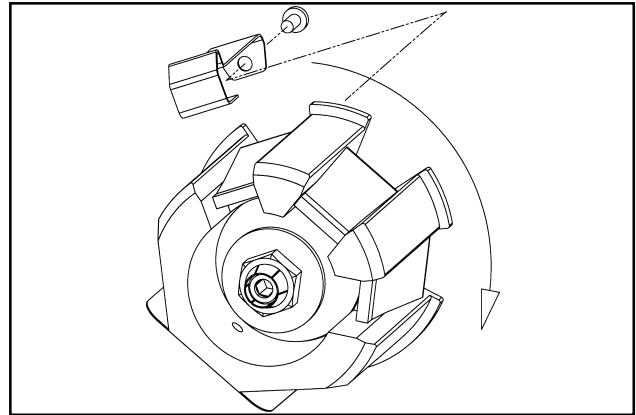


Figure 5-1—Tape Latch Alignment

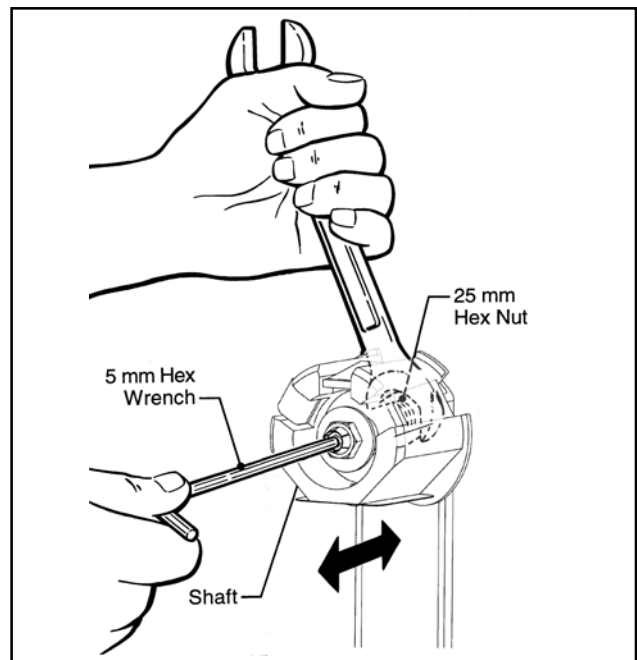


Figure 5-2—Tape Web Alignment

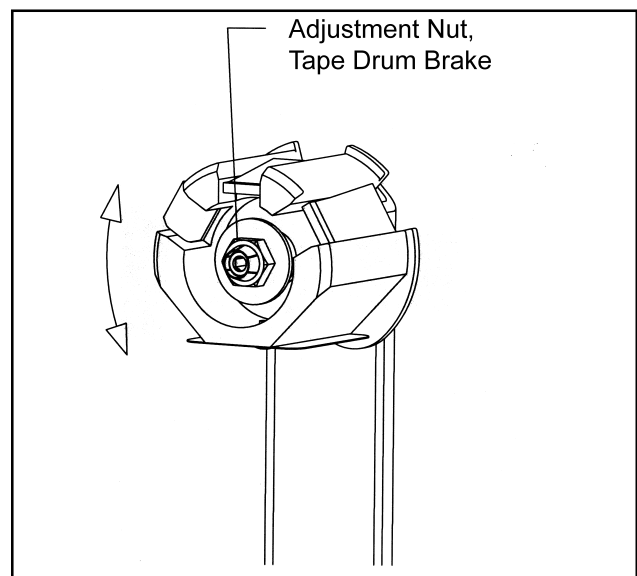


Figure 5-3—Tape Drum Friction Brake

Adjustments (Continued)

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads.
 - Never attempt to work on the taping head or load tape while the box drive system is running.

Applying Mechanism Spring

To obtain access to the spring, remove the taping head cover (four mounting screws). Replace cover when finished.

The applying mechanism spring, shown in Figures 5-4A and 5-4B, controls applying and buffing roller pressure on the box and returns the mechanism to the reset position. The spring pressure is pre-set, as shown in Figure 5-3A for normal operation, but is adjustable.

If a tape gap appears on the trailing surface of the box increase spring pressure. If the front of the box is being crushed by the applying roller decrease spring pressure.

To adjust the spring pressure, remove the spring end loop from the spring holder and place loop in other holes provided, as shown in Figure 5-3B.

One-Way Tension Roller

The one-way tension roller is set at the factory. When replacing this assembly, the roller must have 0.5 kg [1 lb.] minimum tangential force when turning.

To adjust tension, do the following:

1. Wrap a non-adhesive cord or small strap 4-6 turns around the tension roller as shown in Figure 5-5.
2. Attach a spring scale to the end of the cord or strap.
3. Turn the adjusting nut with the socket wrench provided, until a force of approximately 0.5 kg to 0.9 kg [1 to 2 lbs.] is required to turn the roller by pulling on the spring scale.

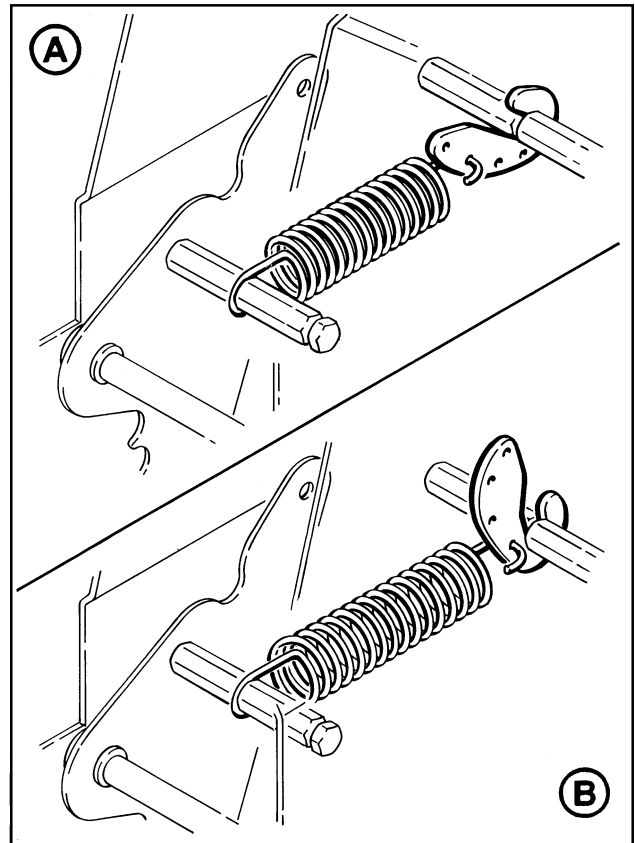


Figure 5-4—Applying Mechanism Spring

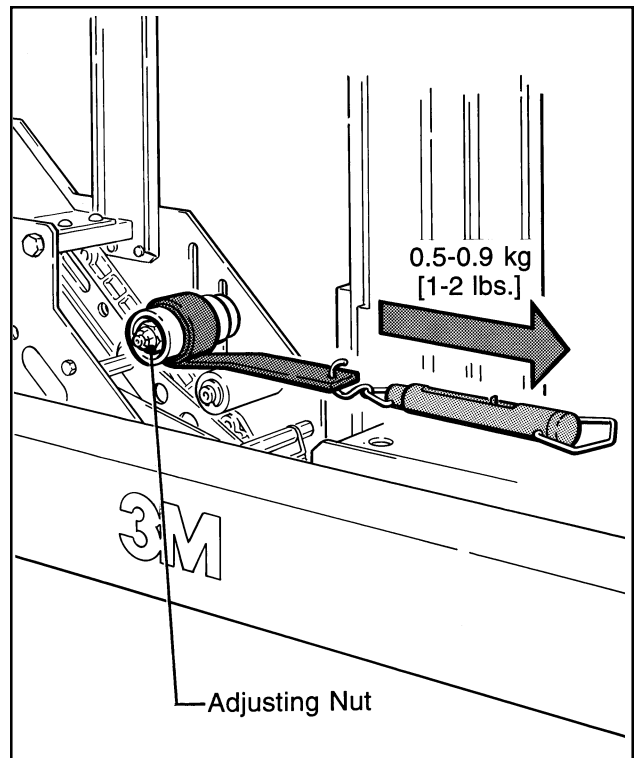


Figure 5-5—One-Way Tension Roller

Adjustments (Continued)

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
 - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads.
 - Never attempt to work on the taping head or load tape while the box drive system is running.

Tape Leg Length

WARNING

- **To reduce the risk associated with sharp blade hazards:**
 - Keep hands and fingers away from tape cutoff knives under orange blade guards. The blades are extremely sharp.

LEADING TAPE LEG LENGTH ADJUSTMENT

The one-way tension roller position is adjustable to control the leading tape leg length.

Moving this roller farther away from the box top or bottom surface will decrease the leading leg length. Moving it closer to the box top or bottom surface will increase the leading leg length as shown in Figure 5-6.

CHANGING TAPE LEG LENGTH FROM 70 to 50 mm [2 3/4 TO 2 INCHES]

Note: When changing tape leg length, adjust both upper and lower heads to apply the same leg lengths.

1. Remove and retain two hex head screws and remove the brush from normal position A on side frame.
2. Remount and secure brush in position A-A on side frame forward of normal location using original fasteners.
3. Remove cutoff bracket extensions from position B.
4. Remount cutoff bracket extensions in forward position B-B.
5. Remove and retain the one-way tension roller assembly from slot C in frame.
6. Remount tension roller assembly near top of slot C-C in frame using original fasteners.
7. Adjust tension roller according to the "Leading Tape Leg Length Adjustment" procedure.

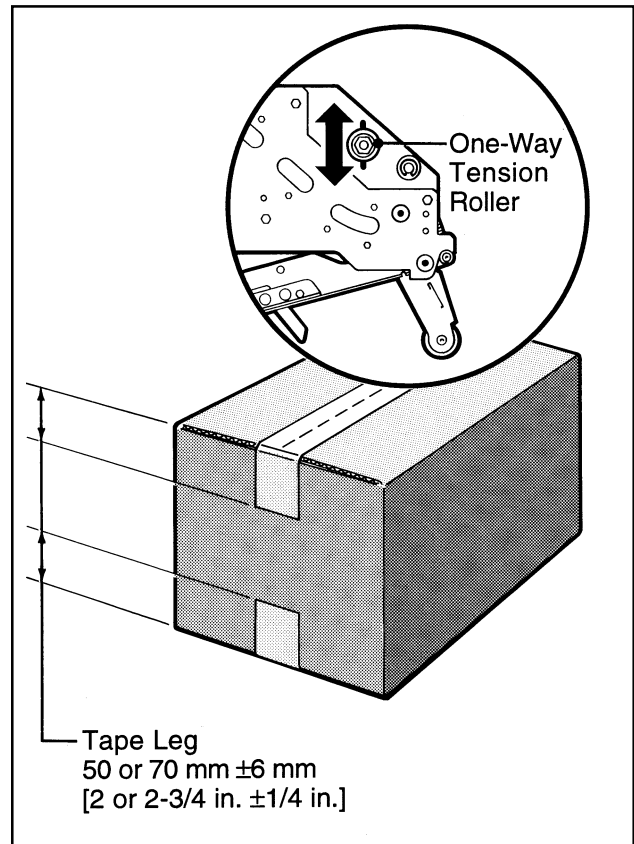


Figure 5-6—Leading Tape Leg Length

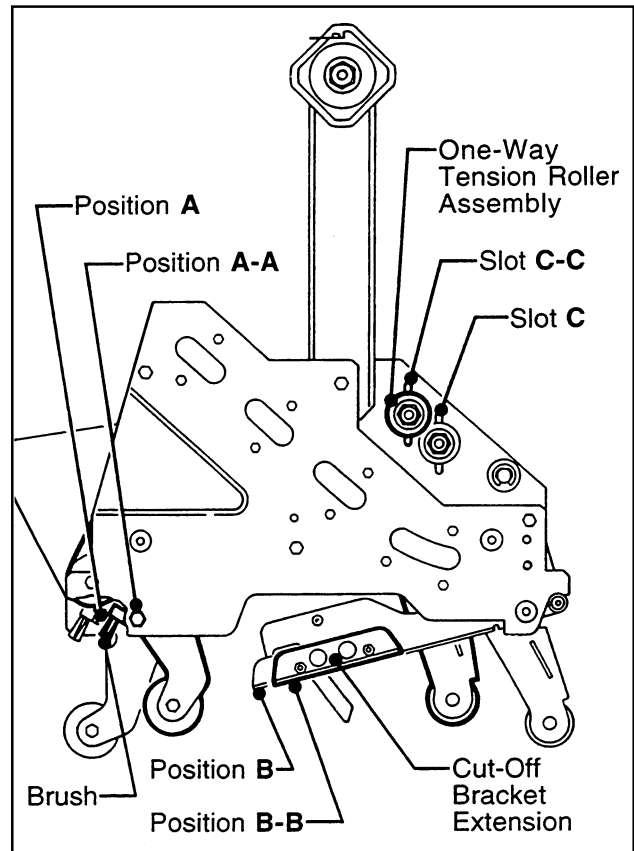


Figure 5-7—Changing Tape Leg Length

Troubleshooting

Problem	Cause	Correction
The tape leg on the front of the box is too long.	The tape is threaded incorrectly.	The tape must go around the wrap roller before going around the one-way tension roller.
	The tape tension is too low.	Adjust the one-way tension roller.
	The knurled roller drags.	Check for adhesive buildup between the knurled roller and its shaft. Clean and lubricate shaft. Remove all lubricant from roller surfaces.
	Tape tracks to one side or drags on the support tabs of applying frame.	Adjust the tape web alignments.
	The one-way tension roller is not correctly positioned.	Position the roller in its mounting slot so that the tape extends just beyond the centerline of the applying roller.
	Taping head is not set up properly.	Check leg length adjustments.
The blade does not cut tape or the tape end is jagged or shredded.	The blade is dull or has broken teeth.	Replace the blade .
	Tape tension is insufficient.	Increase tape tension by adjusting the one-way tension roller.
	Adhesive buildup on the blade .	Clean and adjust the blade .
	The blade is not positioned properly.	The blade is not positioned properly.
	The blade is dry.	Lubricate the blade oiler pad on the blade guard.
	The blade is in backwards.	Mount the blade so that the beveled edge is away from the entrance of the head.
	One or both cutter springs are missing or stretched.	Replace the defective springs.
	Tension roller surface is not fully contacting the taping head frame.	Make sure one-way bearing is below the surface of the tension roller. If not, press bearing further into roller or replace roller.

(Continued)

Troubleshooting Guide (Continued)

Problem	Cause	Correction
Tape tabs on the trailing leg on the back of the box.	There is excess tension on the tape drum assembly, the one-way tension roller assembly, or both.	Adjust the one-way tension roller, the tape drum assembly, or both.
	Rollers in the tape path do not rotate freely.	Clean adhesive deposits from the surface, ends, and shafts of the rollers. Then lubricate roller shafts. Remove all lubricant from roller surfaces.
	The blade is not cutting tape properly.	Refer to tape cutting problems.
	The tape is threaded incorrectly.	Rethread the tape.
	Applying mechanism spring has too little tension.	Move spring hook to next tighter hole.
The tape end does not stay in application position in front of the applying roller.	The tape is incorrectly threaded.	Rethread the tape.
	Flanged knurled roller overruns on return of applying mechanism to its rest position.	Adjust tension roller position in mounting slot to lengthen tape leg
	Applying roller overruns on return of applying mechanism to its rest position.	There should be a slight drag when rotating the applying roller. If not, check friction springs and friction pins and replace if necessary
	The one-way tension roller is not correctly positioned.	Position roller in its mounting slot so that tape end extends beyond centerline of applying roller.
	The one-way tension roller is defective.	Replace the one-way tension roller.
Tape not centered on box seam	Tape drum not centered.	Reposition tape drum.
	Centering guides not centered.	Adjust centering guides.
	Box flaps not of equal length.	Check box specifications.

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Spare Parts and Service Information

Recommended Spare Parts

It is recommended that the following taping head spare parts that periodically require replacement due to normal wear be ordered and kept on hand. These parts are supplied with all 3M-Matic™ case sealer models except the a20, a70, r70, and a80 case sealers.

AccuGlide™ 2+ STD 2 Inch Upper Taping Head			
Qty.	Ref. No	3M Part No.	Description
4	10397-22	78-8076-4500-3	Stud, Mounting
1	10387-10	78-8070-1274-1	Spring, Upper Extension (Silver)
1	10391-2	78-8017-9173-8	Blade, 65 mm (2.56")
2	10391-12	78-8052-6602-6	Spring, Cutter
1	--	78-8076-4726-4	Tool, Tape Threading
AccuGlide™ 2+ STD 2 Inch Lower Taping Head			
Qty	Ref. No.	Part No.	Description
1	10391-2	78-8017-9173-8	Blade, 65 mm (2.56")
2	10391-12	78-8052-6602-6	Spring, Cutter
4	10399-22	78-8076-4500-3	Stud, Mounting
1	10389-10	78-8070-1273-3	Spring, Lower Extension (Black)
1	--	78-8076-4726-4	Tool, Tape Threading

In addition to the above set of spare parts, it is recommended that the following spare parts that also require replacement due to normal wear be ordered and kept on hand.

Qty	Ref. No.	3M Part No.	Description
1	10393-15	78-8057-6179-4	Roller, Applying
1	10387/10389-5	78-8057-6178-6	Roller, Buffing
1	10391-18	78-8113-7030-9	Spring, Torsion

Replacement Parts and Service

Refer to the “**Replacement Parts and Service Information**” page of this manual.

Replacement Parts Illustrations and Parts Lists

AccuGlide™ 2+ STD 2 Inch Upper Taping Head, Type 10500

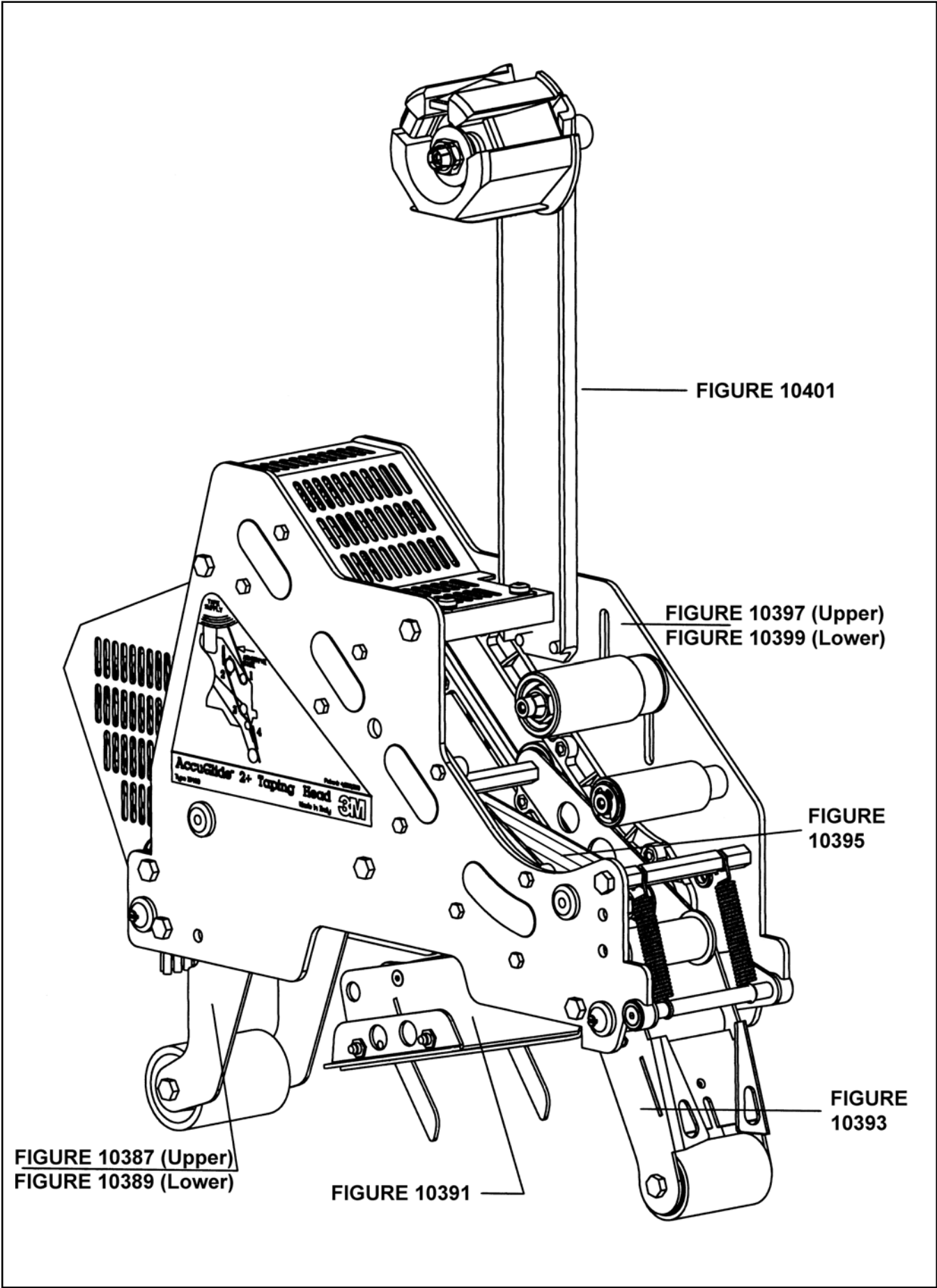
AccuGlide™ 2+ STD 2 Inch Lower Taping Head, Type 10500

1. Refer to the **Taping Head Assemblies** Figure to find all the parts illustrations identified by **figure numbers**.
2. Refer to the figure or figures to determine the **individual parts** required and the **parts reference number**.
3. The **replacement parts list**, that follows each illustration includes the **part number** and **part description** for the parts in that illustration.

***Note:** The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, if desired.*

4. Refer to the **Replacement Parts and Service Information** page of this manual for replacement parts ordering information.

***IMPORTANT:** Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only by special order. Contact 3M Tape Dispenser Parts to confirm item availability.*



Taping Head Assemblies—AccuGlide™ 2+ STD 2 Inch

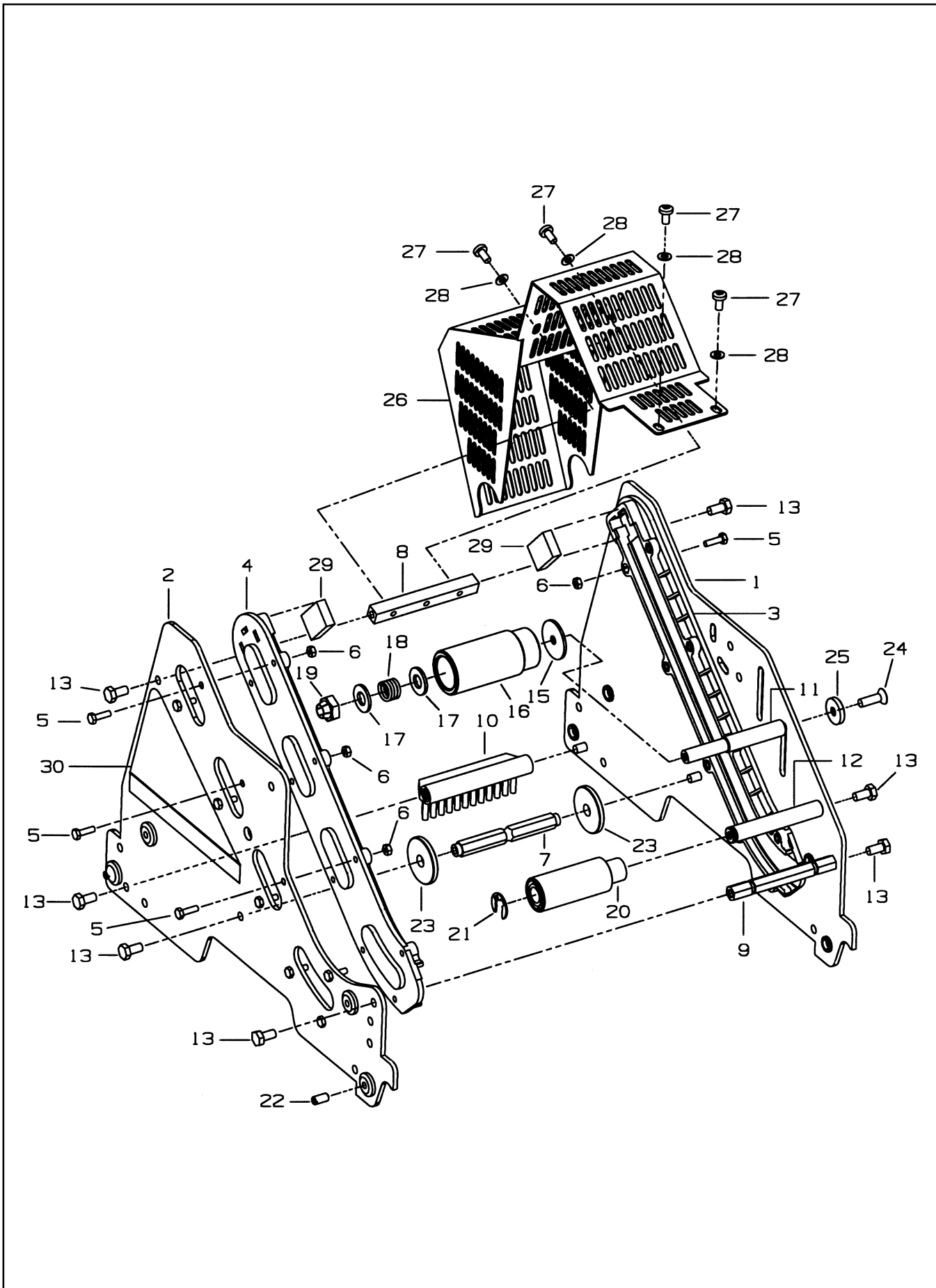


Figure 10397—Upper Head

Figure 10397—2" Upper Head

Ref. No.	3M Part No.	Description
10397-1	78-8133-9456-2	Frame, Tape Mount Upper Assembly
10397-2	78-8133-9458-8	Frame, Front Upper Assembly
10397-3	78-8068-4143-9	Guide, #1
10397-4	78-8068-4144-7	Guide, #2
10397-5	78-8060-7818-0	Screw, Hex Hd., M4 x 12
10397-6	78-8010-7416-8	Nut, Hex Jam, M4
10397-7	78-8070-1251-9	Spacer, Spring
10397-8	78-8054-8764-8	Spacer, 10 x 10 x 90 mm
10397-9	78-8052-6560-6	Spacer, Front
10397-10	78-8060-7936-0	Brush Assembly
10397-11	78-8052-6564-8	Shaft, Tension Roller
10397-12	78-8052-6568-9	Shaft, Wrap Roller
10397-13	26-1003-5829-5	Screw, Hex Hd., M6 x 12
10397-15	78-8100-1009-6	Washer, Special
10397-16	78-8052-6565-5	Roller, Top Tension
10397-17	26-1004-5510-9	Washer, Plain, M10
10397-18	78-8052-6567-1	Spring, Compression
10397-19	78-8017-9077-1	Nut, Self Locking, M10 x 1
10397-20	78-8052-6569-7	Roller, Wrap
10397-21	26-1000-1613-3	Ring, Retaining, Tru-Arc#1-420-0120-100
10397-22	78-8076-4500-3	Stud, Mounting
10397-23	78-8076-5242-1	Stop, Cutoff Frame
10397-24	78-8060-8179-6	Screw, Flat Hd. Hex, M6 x 20
10397-25	78-8076-5477-3	Washer, Special, 6.5 x 20 x 4
10397-26	78-8100-1047-6	Guard, Head
10397-27	78-8060-8087-1	Screw, M5 x 10
10397-28	78-8005-5741-1	Washer, Flat, M5
10397-29	78-8133-9615-3	Bumper
10397-30	78-8133-9605-4	Label, Threading, English Language

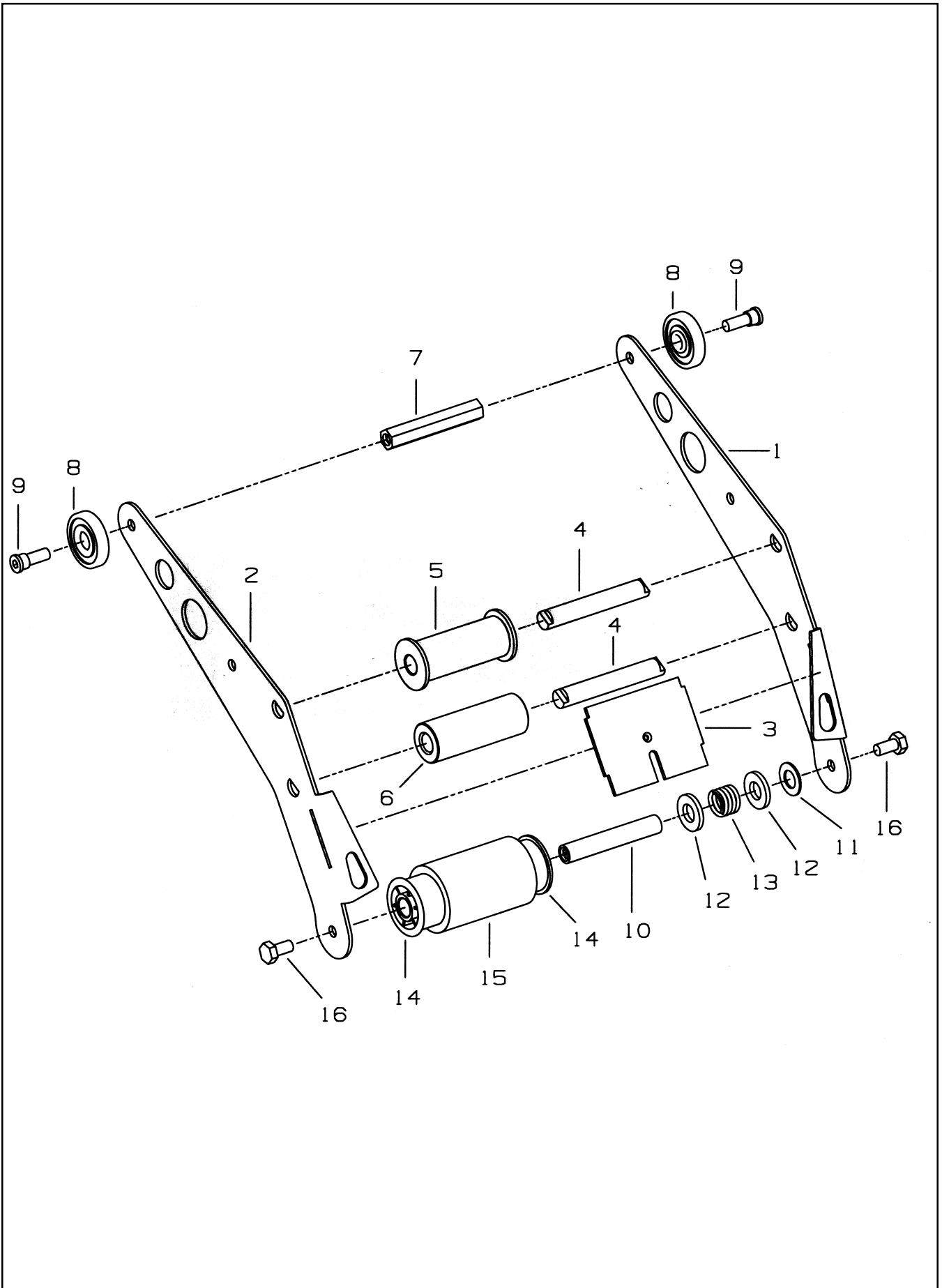


Figure 10393—Upper and Lower Heads

Figure 10393—2" Upper and Lower Heads

Ref. No.	3M Part No.	Description
10393-1	78-8133-9509-8	Applying Arm #1
10393-2	78-8133-9510-6	Applying Arm #2
10393-3	78-8070-1221-2	Plate, Tape
10393-4	78-8070-1309-5	Shaft, Roller
10393-5	78-8070-1367-3	Roller, Knurled Assembly
10393-6	78-8070-1266-7	Roller, Wrap
10393-7	78-8052-6580-4	Spacer
10393-8	78-8017-9082-1	Bearing, Special, 30 mm
10393-9	78-8017-9106-8	Screw, Bearing Shoulder
10393-10	78-8052-6575-4	Shaft, Roller
10393-11	78-8017-9074-8	Washer, Nylon, 15 mm
10393-12	78-8052-6566-3	Washer, Friction
10393-13	78-8052-6567-1	Spring, Compression
10393-14	78-8060-8395-8	Bushing, Applying Roller
10393-15	78-8057-6179-4	Roller, Applying
10393-16	26-1003-5829-5	Screw, Hex Hd., M6 x 12

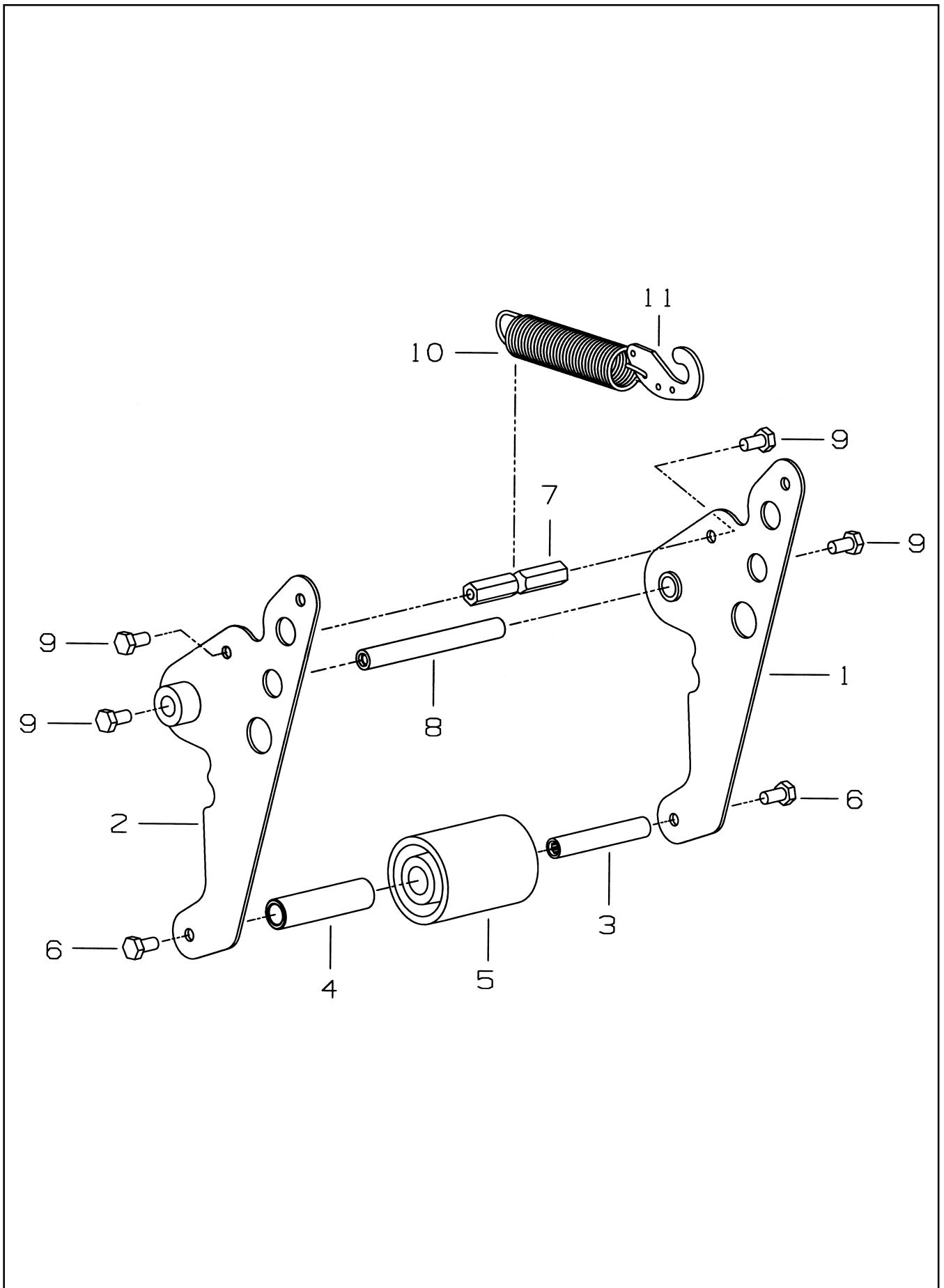


Figure 10387—Upper Head

Figure 10387—2" Upper Head

Ref. No.	3M Part No.	Description
10387-1	78-8070-1392-1	Buffing Arm, Subassembly
10387-2	78-8070-1391-3	Buffing Arm, Subassembly
10387-3	78-8052-6575-4	Shaft, Roller
10387-4	78-8052-6586-1	Bushing, Buffing Roller
10387-5	78-8057-6178-6	Roller, Buffing
10387-7	78-8070-1220-4	Spacer, Spring
10387-8	78-8017-9109-2	Shaft, 10 x 90 mm
10387-9	26-1003-5829-5	Screw, Hex Hd., M6 x 12
10387-10	78-8070-1274-1	Spring, Upper (Silver)
10387-11	78-8070-1244-4	Holder, Spring

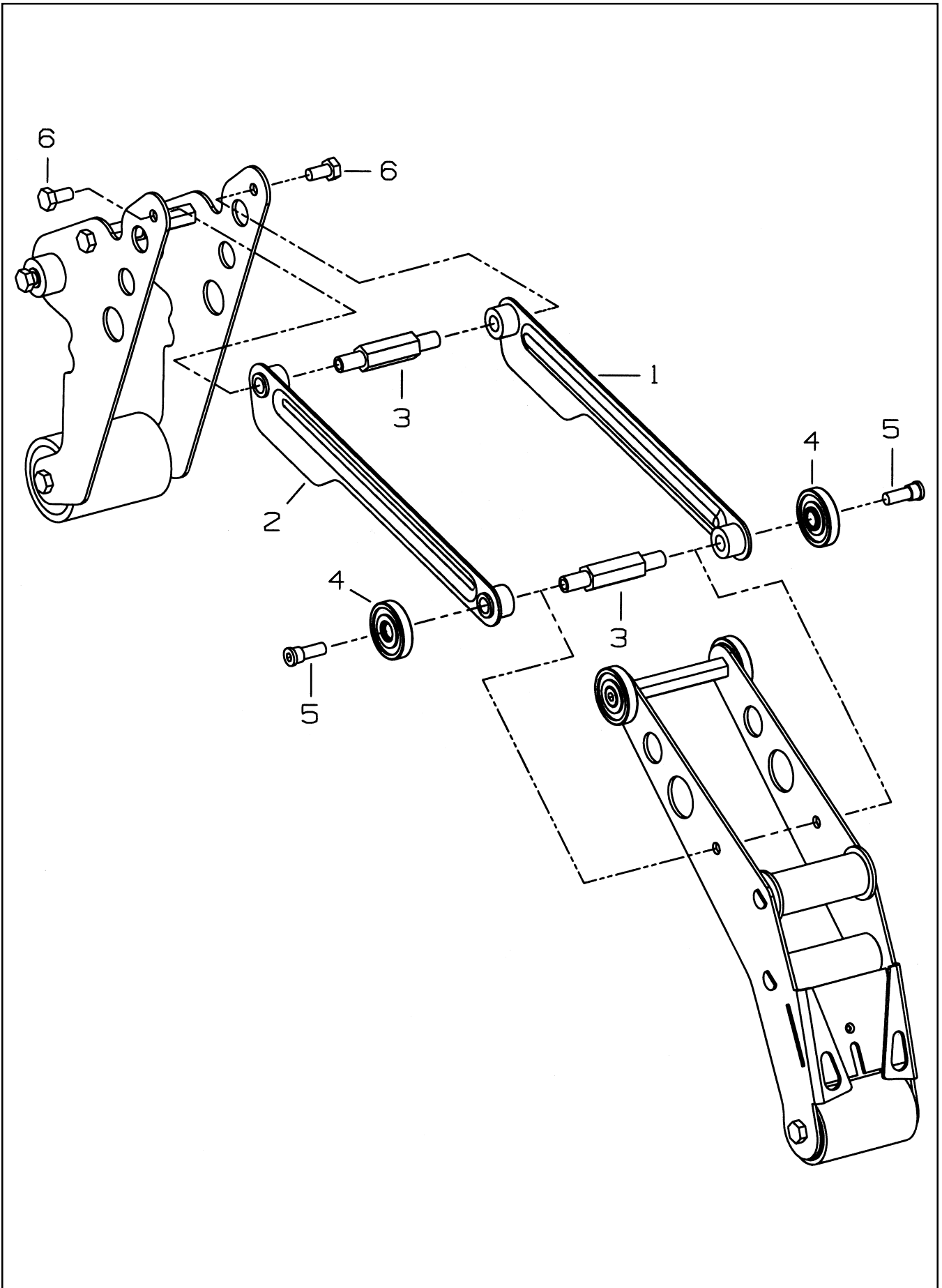


Figure 10395—Upper and Lower Heads

Figure 10395–2" Upper and Lower Taping Heads

Ref. No.	3M Part No.	Description
10395-1	78-8070-1388-9	Link, Arm Bushing Assembly
10395-2	78-8070-1389-7	Link, Arm Bushing Assembly
10395-3	78-8070-1271-7	Shaft, Pivot
10395-4	78-8017-9082-1	Bearing, Special, 30 mm
10395-5	78-8017-9106-8	Screw, Bearing Shoulder
10395-6	26-1003-5829-5	Screw, Hex Hd., M6 x 12

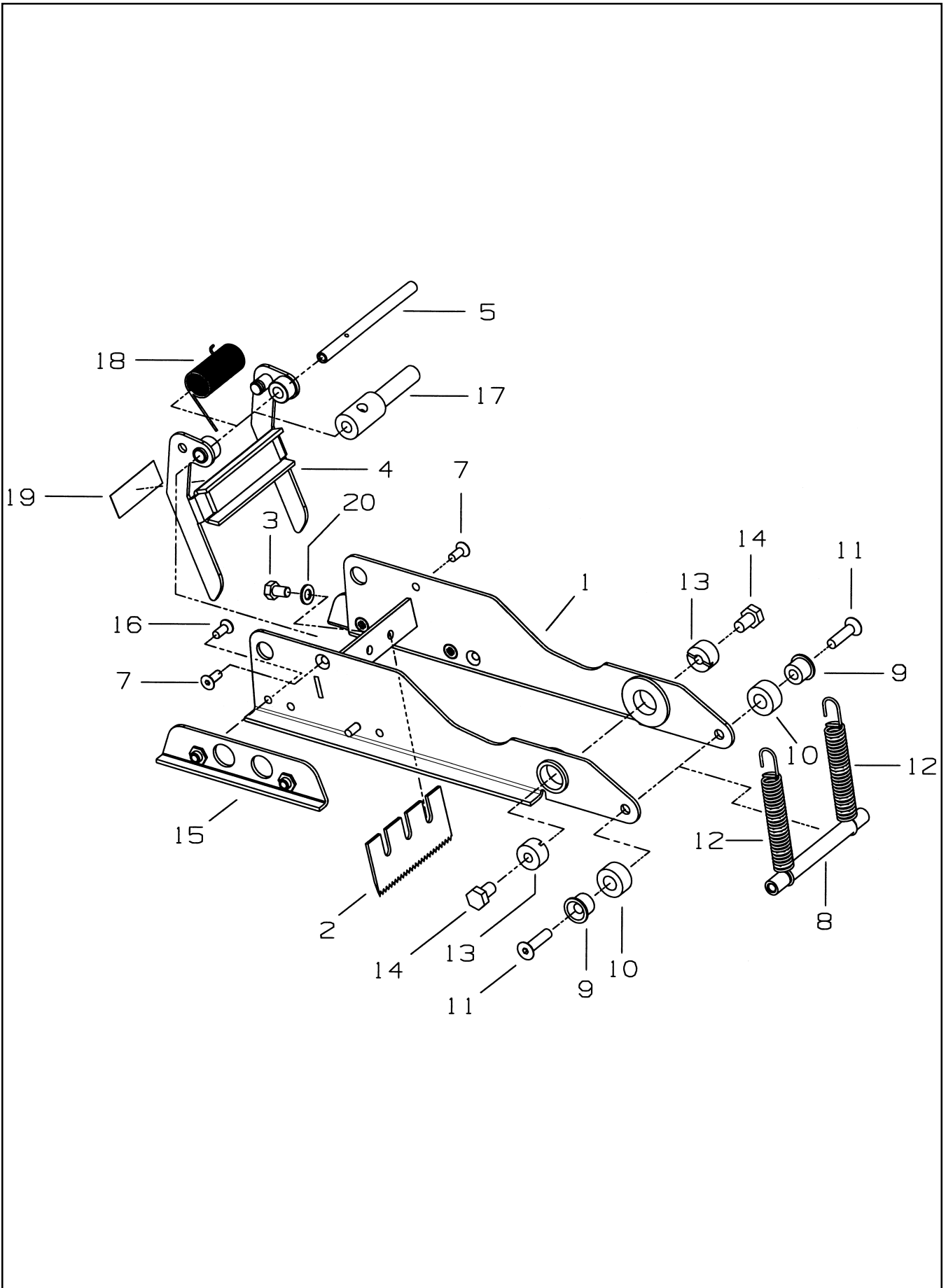


Figure 10391—Upper and Lower Heads

Figure 10391—2" Upper and Lower Heads

Ref. No.	3M Part No.	Description
10391-1	78-8070-1217-0	Frame, Cutoff Weldment
10391-2	78-8017-9173-8	Blade, 65 mm (2.56 Inch)
10391-3	26-1002-5817-2	Screw, Hex Hd., M5 x 8
10391-4	78-8070-1371-5	Blade Guard Assembly, w/English Language Label
10391-5	78-8052-6597-8	Shaft, Blade Guard
10391-7	26-1005-4758-2	Screw, Flat Hd., Soc Dr., M4 x 10
10391-8	78-8017-9135-7	Shaft, Spacer
10391-9	78-8052-6600-0	Spacer
10391-10	78-8070-1269-1	Bumper
10391-11	26-1005-4757-4	Screw, Flat Hd, Soc. Dr., M5 x 20
10391-12	78-8052-6602-6	Spring, Cutter
10391-13	78-8017-9132-4	Pivot, Cutter Lever
10391-14	26-1003-5828-7	Screw, Spec, Hex Hd., M6 x 10
10391-15	78-8070-1216-2	Slide, Extension
10391-16	26-1008-6574-5	Screw, Flat Hd., Phillips Dr., M4 x 10
10391-17	78-8113-7031-7	Bushing, 58.5 mm Long
10391-18	78-8113-7030-9	Spring, Torsion
10391-19	78-8070-1335-0	Label, Warning, English

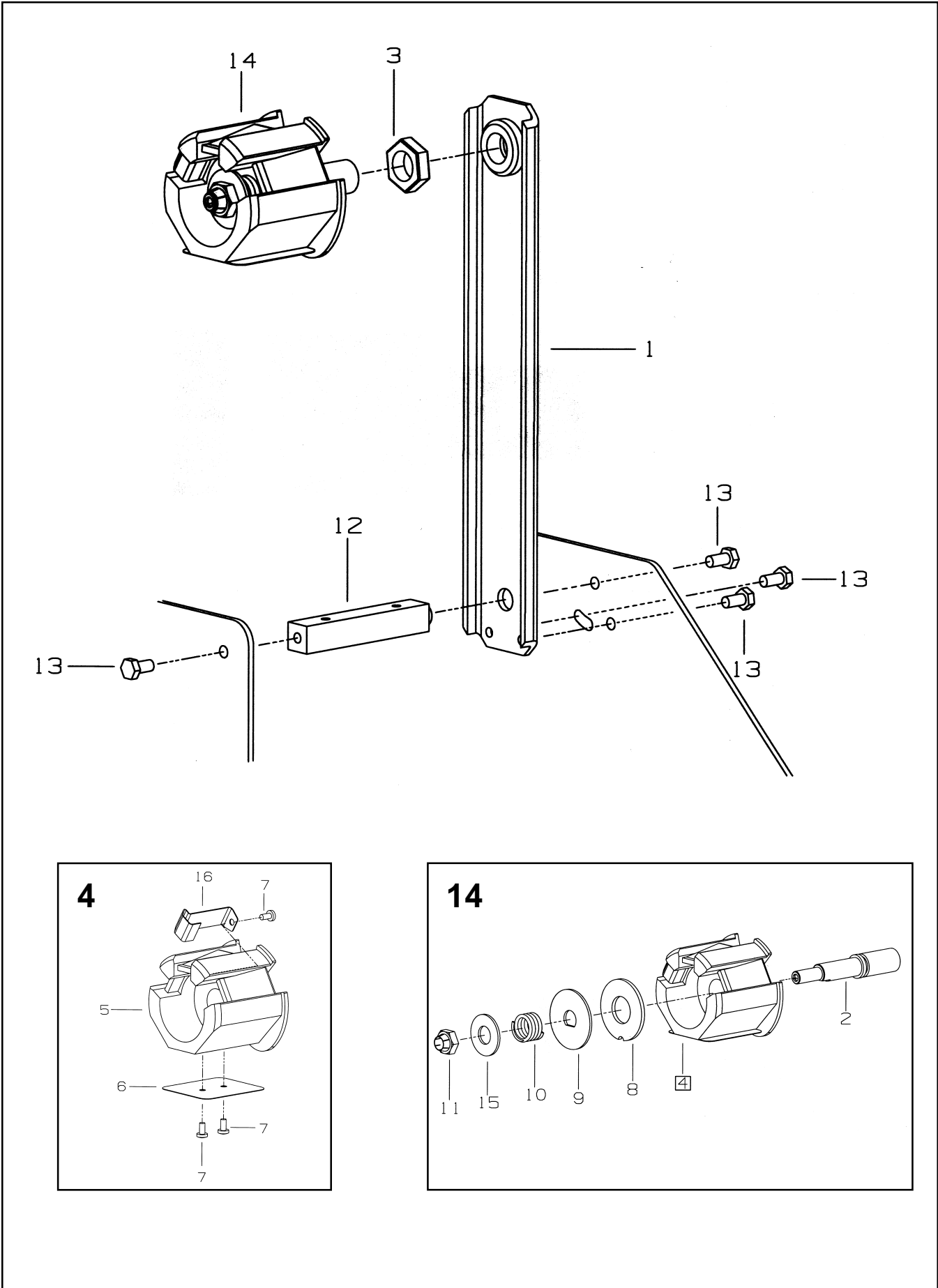


Figure 10401—Upper and Lower Heads

Figure 10401—2" Latch Upper and Lower Heads

Ref. No.	3M Part No.	Description
10401-1	78-8070-1395-4	Bracket, Bushing Assembly
10401-2	78-8076-4519-3	Shaft, Tape Drum, 50 mm
10401-3	78-8017-9169-6	Nut, M18 x 1
10401-4	78-8098-8827-0	Tape Drum Sub Assembly, 2" Wide
10401-5	78-8098-8749-6	Tape Drum
10401-6	78-8098-8817-1	Leaf Spring
10401-7	26-1002-5753-9	Screw, Self-Tapping
10401-8	78-8060-8172-1	Washer, Friction
10401-9	78-8052-6271-0	Washer, Tape Drum
10401-10	78-8100-1048-4	Spring, Core Holder
10401-11	78-8017-9077-1	Nut, Self Locking, M10 x 1
10401-12	78-8100-1046-8	Spacer, Bracket
10401-13	26-1003-5829-5	Screw, Hex Hd., M6 x 12
10401-14	78-8098-8814-8	Tape Drum Assembly, 2 Inch Head
10401-15	26-1004-5510-9	Washer, Plain, M10
10401-16	78-8098-8816-3	Latch, Tape Drum

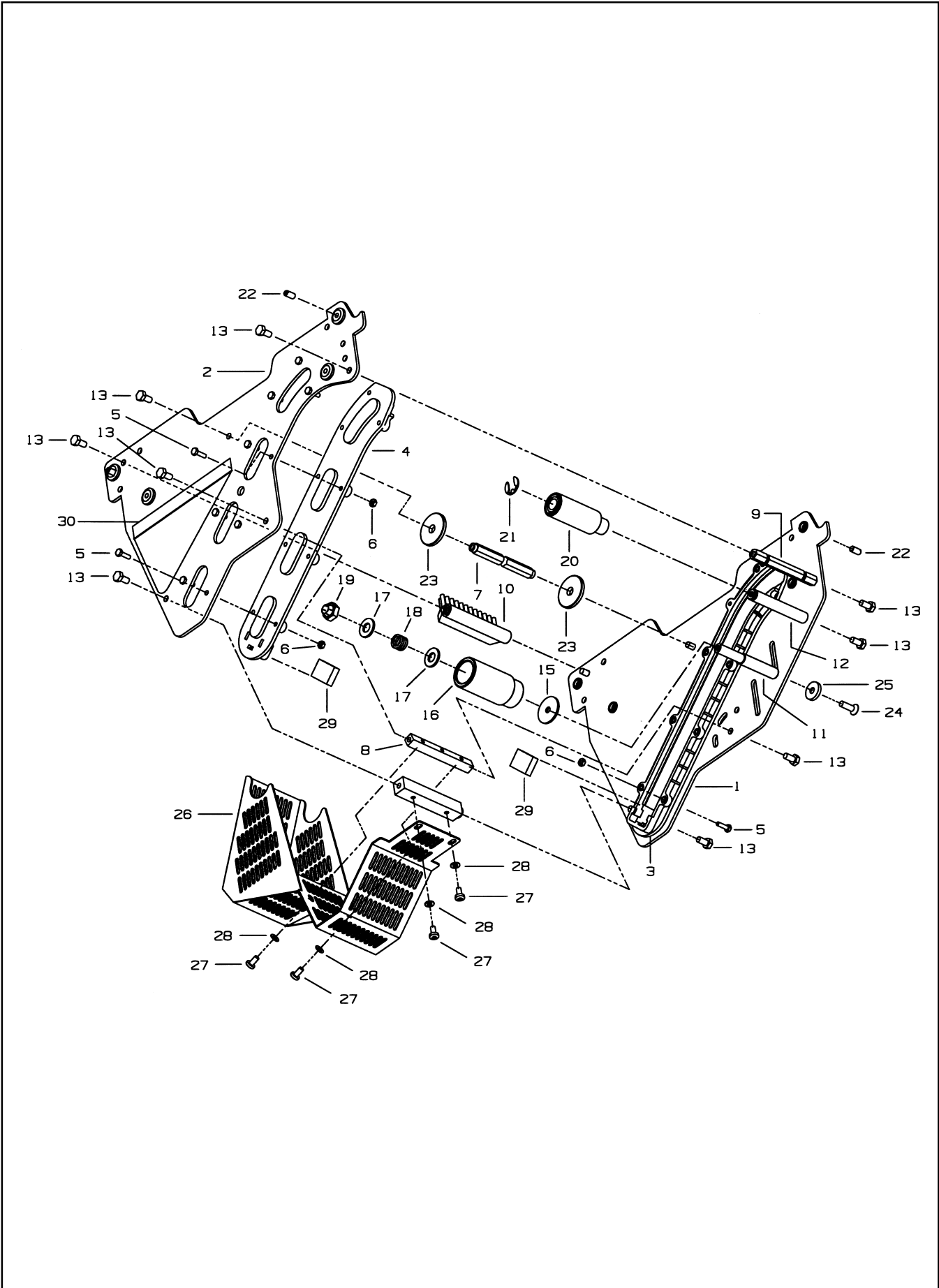


Figure 10399—Lower Head

Figure 10399—2" Lower Head

Ref. No.	3M Part No.	Description
10399-1	78-8133-9502-3	Frame, Tape Mount Lower Assembly
10399-2	78-8133-9500-7	Frame, Front Lower Assembly
10399-3	78-8068-4144-7	Guide, #2
10399-4	78-8068-4143-9	Guide, #1
10399-5	78-8060-7818-0	Screw, Hex Hd., M4 x 12
10399-6	78-8010-7416-8	Nut, Hex, M4
10399-7	78-8070-1251-9	Spacer, Spring
10399-8	78-8054-8764-8	Spacer, 10 mm x 10 mm x 90 mm
10399-9	78-8052-6560-6	Spacer, Front
10399-10	78-8060-7936-0	Brush Assembly
10399-11	78-8052-6564-8	Shaft, Tension Roller
10399-12	78-8052-6568-9	Shaft, Wrap Roller
10399-13	26-1003-5829-5	Screw, Hex Hd., M6 x 12
10399-15	78-8100-1009-6	Washer, Special
10399-16	78-8052-6606-7	Roller, Tension Bottom
10399-17	26-1004-5510-9	Washer, Plain, M10
10399-18	78-8052-6567-1	Spring, Compression
10399-19	78-8017-9077-1	Nut, Self-Locking, M10 x 1
10399-20	78-8052-6569-7	Roller, Wrap
10399-21	26-1000-1613-3	Ring, Retaining, Tru-Arc#1-420-0120-100
10399-22	78-8076-4500-3	Stud, Mounting
10399-23	78-8076-5242-1	Stop, Cutoff Frame
10399-24	78-8060-8179-6	Screw, Flat Hd. Hex, M6 x 20
10399-25	78-8076-5477-3	Washer, Special, 6.5 x 20 x 4
10399-26	78-8100-1047-6	Guard, Head
10399-27	78-8060-8087-1	Screw, M5 x 10
10399-28	78-8005-5741-1	Washer, Flat, M5
10399-29	78-8076-4734-8	Bumper
10399-30	78-8133-9606-2	Label, Threading, English Language

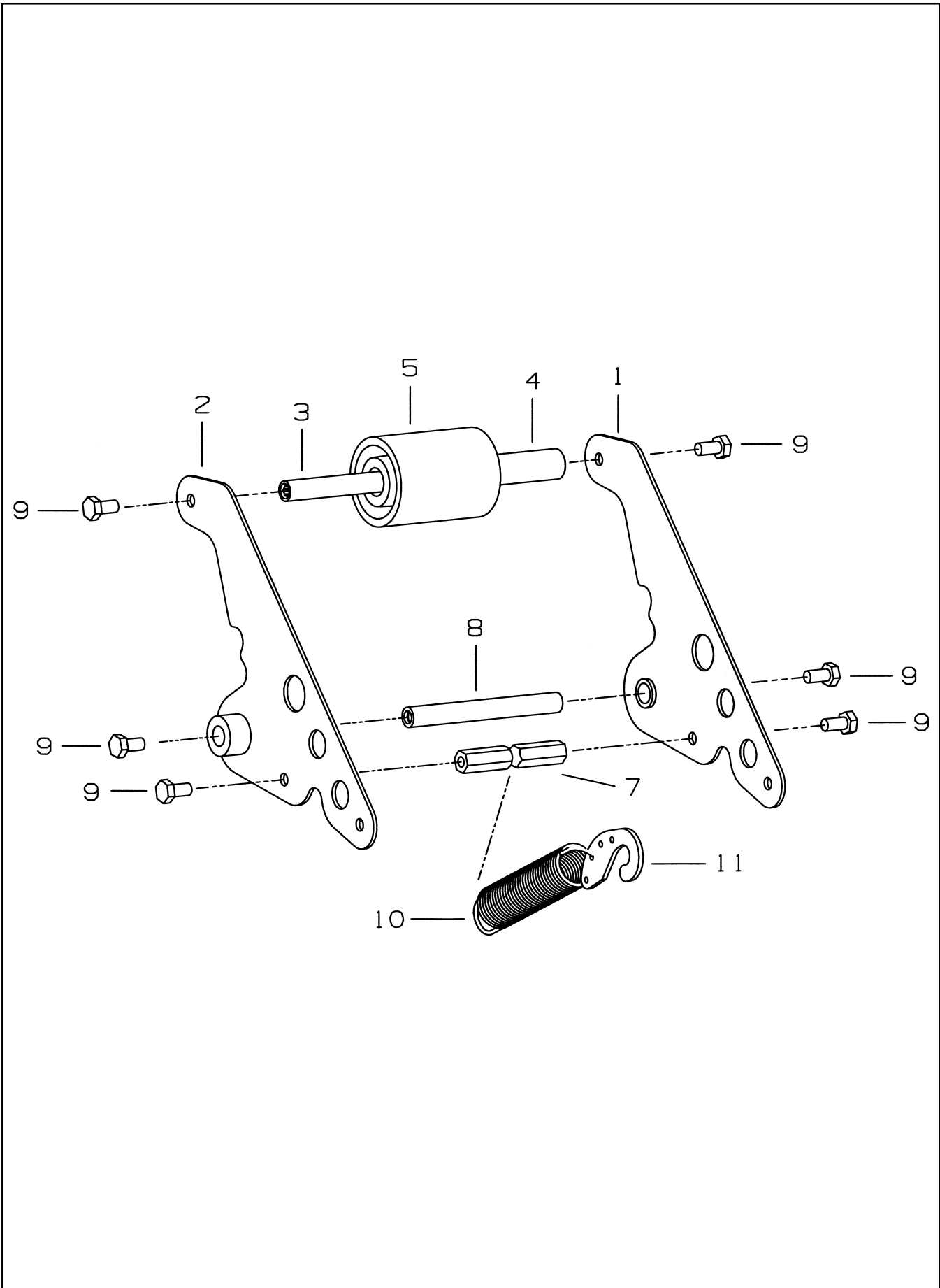


Figure 10389—Lower Head

Figure 10389—Lower Head

Ref. No.	3M Part No.	Description
10389-1	78-8070-1391-3	Buffing Arm Sub Assembly, #1
10389-2	78-8070-1392-1	Buffing Arm Sub Assembly, #2
10389-3	78-8052-6575-4	Shaft, Roller
10389-4	78-8052-6586-1	Bushing, Buffing Roller
10389-5	78-8057-6178-6	Roller, Buffing
10389-7	78-8070-1220-4	Spacer, Spring
10389-8	78-8017-9109-2	Shaft, 10 mm x 90 mm
10389-9	26-1003-5829-5	Screw, Hex Hd., M6 x 12
10389-10	78-8070-1273-3	Spring, Lower (Black)
10389-11	78-8070-1244-4	Holder, Spring

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